TRANSCRIPT - June 2025 ASQE Ascend Webinar
Building Resilience: Tackling Volatility and Risk with Quality Practices

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Brian Scarpace: Hello, everybody! Welcome! Welcome to today's ASQE Ascend Webinar. We're just gonna give it

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Brian Scarpace: another minute or so. We're letting some people in the room right now, so welcome.

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Brian Scarpace: Hey, while we're waiting, if you wouldn't mind, please let us know where you're joining us from. Please put it in the chat; we uh, we're serving members from around the world, and we will, it's always great to see where where people are joining us from.

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Brian Scarpace: And we have a some people joining us now.

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Brian Scarpace: UK. Excellent. Ohio, Massachusetts, great. Fantastic. Singapore and Milwaukee.

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Brian Scarpace: Alright folks. Well, you know, we've got a lot of great content today, so we're gonna go ahead and get started.

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Brian Scarpace: Welcome to today's ASQE Webinar. We're focused on tackling volatility and risk and quality practices. My name is Brian Scarpace, and I serve as the Executive Director of Global Success for ASQExcellence, and we're so glad you're here. Uh, first, before we get started, I want to say thank you so much to our Organizational Members who have joined us today. And I want to say thank you for your membership, and we also have guests who have joined us here today. So, we're looking forward to providing a lot of great content today in our presentation and panel discussion.

1:22
Brian Scarpace: A couple of items to note for today's presentation is that the presentation itself, as well as the recording, will be available post-call. So we'll email you that to you, probably next day or so, and then we also make it available on our ASQE Events Portal. We'll put a link in the chat for you there, and while we're going through our discussion, if you have any questions that we hope you do, please feel free to put them in the chat, and we'll get to those as best we can in the Q&A section.

1:51
Brian Scarpace: Before we get started, we want to let everyone know who's Organizational Members on the call, know that one of the main benefits that are is made available to you as an Organizational Member is the Insights on Excellence benchmarking tool, and the season is still open for benchmarking. It's gonna be closing soon, so we hope that you have an opportunity to take the benchmarking tool. And if you're not too familiar with what the benchmarking tool does for you and your organization,

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Brian Scarpace: it helps identify areas of opportunity and operational excellence, and it also helps you compare your results with other people around the world. So, it's a great tool, a great, unique benefit that we make available to organizations around the world and support to support their performance excellence journey.

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Brian Scarpace: Couple of items to note in terms of what is new - a new feature of the benchmarking tool is we are now offering RUs, or Recertification Units, so that's a great feature. And we are also excited to note that if you and your organization participate in the benchmarking tool, you are eligible to be considered for the Insights on Excellence Diamond Award, so this is a great way for you and your organization to be recognized, and we plan to recognize those who win the award at our Excellence Roundtable at the end of the year.

3:00
Brian Scarpace: One other aspect of the Insights on Excellence is the research that we make available, and we make research through our Insights on Excellence research available, complementary for the world as part of our mission to support organizations on their performance excellence journey. And, in fact, today's conversation is gonna

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Brian Scarpace: touch on some of the data points that are within our most recent report that we published is the 2025 Benchmarking Highlights Report. So, you can download a copy of this today at insightsonexcellence.org, and we'll also be sending an email to you in the next week or so. But you'll, please be on the lookout for that.

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Brian Scarpace: All right. We are super excited; we have an awesome panel today, and, great moderator. I'll just kind of kick us off and introduce everybody. First and foremost, Richard Uphoff. Richard is an, Hi Richard. Richard is an ASQE Board of Directors member, and also an ASQ Organizational Member.

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Brian Scarpace: He's gonna be moderating our panel. Richard is a Manager and Registered Principal Principal with The Vanguard Group in Scottsdale, Arizona. He has over 30 years of experience in financial services, and has been a leader

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Brian Scarpace: of leaders for 25 of those 30 years. He is a Senior Member of ASQ and is Past Chair of the Human Development and Leadership Division. He's also founder a founding member of the Financial Services Division of ASQ, and currently serves on the ASQE Board of Directors, like I mentioned. So, Richard, Richard, welcome to you.

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Brian Scarpace: And, moving on to Russ, Russ Snyder is a Registered Professional Engineer, MBA, and Lean Six Sigma Green Belt, and member of the Oregon State Supply Chain Council. He retired as Senior Director of Supply Chain at the Intel Corporation in 2023. Russ is currently founder of 6 Sigma Supply Chain, a consultancy for applying lean into the supply chain for efficiency, resilience, and sustainability

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Brian Scarpace: And welcome Dr. Elizabeth Cudney. Dr. Cudney is president of Cudney Consulting Group, LLC. and Professor of Data Analytics at Maryville University, and that's in St. Louis, my hometown. She holds a B.S. in Industrial Engineering, a Master's in Mechanical Engineering,

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Brian Scarpace: an MBA and a Doctorate in Engineering Management. Beth is a recipient of the ASQ Grant Medal, ASQ Crosby Medal, IAQ Masing Book Prize, IAQ Yoshio Kondo Academic Research Prize, and ASQ A.V. Feigenbaum Medal. She is also an ASQ Fellow, IISE Fellow, ASEM Fellow, and Academician in the International

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Brian Scarpace: Academy for Quality.

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Brian Scarpace: So welcome back.

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Brian Scarpace: And Aimee Siegler. Aimee Siegler is also an Organizational Member with Benchmark Electronics, and she's worked in the electronics industry for more than 25 years with roles focused on supplier development and quality management. She is an ASQ Member Leader with current roles, including East North Central Deputy Deputy Regional Director,

6:01
Brian Scarpace: Winnebago Section Programs Chair, and Secretary of the Electronics and Communications Division. So, we are so thrilled to bring this great panel to you today. Richard, I'm going to hand it over to you,

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Brian Scarpace: and I'll let you take it from here.

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Richard Uphoff: Okay, great. Thank you very much, Brian. Can you hear me? Okay.

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Brian Scarpace: Yes, we can, Richard.

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Richard Uphoff: Okay, great.

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Richard Uphoff: All right. Well, thank you, Brian, for that introduction. Thanks. You know, I'm excited to be here. I'm excited to lead this panel discussion, and we have a great lineup of experts here, and we're gonna get into it. But before we do, I do want to put in a quick plug back to that benchmarking report that Brian mentioned. You know Russ, Russ, one of the panelists. He and I were in a breakout session at the World Conference

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Richard Uphoff: last month in Denver. And it was interesting because one of the Member Leaders from ASQ actually asked the group,

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Richard Uphoff: "Hey, like, how do we tell? How can we tell how quality is viewed in in other industries and at other places of employment? Other work workplaces?" And I said, "Okay, there's a report for that." Right? So ,and that's the benchmarking report. So that's again, as Brian mentioned, that's one of the values that

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Richard Uphoff: being an Organizational Member can bring. So anyway, just thought I would mention that. But before we get started, a couple of housekeeping things. First off, just thanks to the ASQE staff, who are doing their magic behind the scenes here. Brian's running the slides, Ashley is going to be monitoring the chat, Mandy's our host, and Bev helped put these slides together, so I didn't want to get started without giving a thank you to all of them. And then, thanks

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Richard Uphoff: to all of you who are attending, we have a great representation around the world, truly global representation. And thank you for spending part of your day or night in some cases here with us. You know, this session is going to be, I think, a great example of the value that Organizational Membership can bring. So

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Richard Uphoff: again, as Brian mentioned, we have the chat going. We've got, if you have questions, we will have a Q&A period at the end. But if you have questions that come up, Ashley's monitoring the chat, she'll be adding those

8:11
Richard Uphoff: off to the side, so we can come back and make sure we address those questions. This report, if you haven't seen it already, should be available to you. There's tons of information in here. There's like 50 pages of insights and content. So if you haven't looked at the report that we're going to be talking about, please make sure you do that if you're on my Asq. I just posted a link to it last night. There's a link to it here in the chat, so if you haven't seen it yet, please make sure after this session

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Richard Uphoff: you really take a look at it because there's some great information in here, and you also will get a survey at the end of this. So please make sure you complete that survey, because, after all, right, we wouldn't be ASQ if we weren't seeking improvement. So your feedback really helps us provide improvement for these sessions going forward. So with that, let me just mention a couple of other things, and then we'll get to the panel. So you know, the report really focuses

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Richard Uphoff: focuses on 9 broad areas. But today, we're gonna focus really on 3 of those broad areas or 3 of those specific areas. We're gonna focus on leadership. We're gonna focus on disruptors. And we're gonna focus on operations. So

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Richard Uphoff: you know, stated in the overview of the report, right? We want to give you some actionable insights. So yes, we're going to be picking the brains of these experts and really helping shed some light on these important topics, but we really want you to walk away from this time spent with us with some actionable insights. So as we, you know, get into this, we'll be thinking about that for you all out there in the audience.

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Richard Uphoff: So with that, if we could, Brian, turn to the next slide.

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Richard Uphoff: So, as Brian mentioned, I'm the former chair of the Human Development Leadership Division, and we know that it all starts with leadership. And as this, we only have 3 slides of content here, so we can go deep on some of these ideas and concepts. But as I mentioned, it all starts with leadership and one of the things one of the questions in this the report asked the survey respondents,

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Richard Uphoff: "To what extent do you agree with the following statements about leadership of your organization: that leaders have made quality a priority." And I'm not necessarily gonna go into some of the insights here on this table. We'll ask our panelists to go into that. But let's maybe start

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Richard Uphoff: start with this concept of like. I'll start with Aimee with you first.

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Richard Uphoff: You know, you mentioned in the sidebar that is contained at the end of the report, you mentioned, you know, the role of leadership in the ISO standard. So I guess my 1st question is like, what surprised you about these results? And what do you think are some of the reasons behind some of the changes that we see in these results?

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Aimee Siegler: Thanks, Richard. So look, looking at the the changes over time and the the fact that

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Aimee Siegler: there's a decline in the perception that leadership has made quality a priority.

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Aimee Siegler: The the thing that really struck me is the fact that sometimes leadership is not aware that the message that they're sending isn't in alignment with what they think. I've seen that within organizations where, for example.

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Aimee Siegler: the the measurements that you flow down

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Aimee Siegler: throughout the organization don't include measurements related to quality. So it sends the message to the team.

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Aimee Siegler: even though quality may be important to the organization. The message that the team gets is that quality isn't important because we don't have any metrics or measurements around quality within the organization. And it's interesting, too, there, because there seems to be some difference between customer. Satisfaction is quality versus manufactured quality when you're dealing with a product.

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Aimee Siegler: and there seems to be more emphasis on that customer service aspect than the the product quality.

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Aimee Siegler: And I think that's if nothing else, because of the visibility that customer service aspects can get when you do have angry customers and you have to deal with those customers a lot of times that gets escalated right to the top, so it becomes more visible. And if it's not related to product quality in that escalation.

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Aimee Siegler: That product quality tends to take the back burner while we're focusing on dealing with angry customers. So

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Aimee Siegler: again, I I think that the a lot of times. The commitment to quality and the importance of quality is

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Aimee Siegler: fairly well understood by the leadership of the organization that there's just this disconnect between what they're communicating to the rest of the organization and what they're thinking about. Quality.

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Richard Uphoff: Okay, great. Thank you for that, Aimee. So maybe, let me punt this to you, Beth. I know in the sidebar again, that's contained at the end of the report, you mentioned sort of resistance to change. So you know, Aimee just talked about,

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Richard Uphoff: you know, sort of maybe difficulty in communicating or sharing the metrics that can track product, quality service, quality and whatnot. But, what do you see as the role of resistance to change from leaders, or from other employees as being a part of this change in the numbers that we're seeing here?

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Beth Cudney: Yeah, that's a great question.

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Beth Cudney: We're in such an interesting time. Just to be perfectly honest, right with how

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Beth Cudney: rapidly technology is changing, where the focus is on. You know, everything that's happening with with AI, and how that's impacting organizations.

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Beth Cudney: What I'm seeing is a lot of shift more towards

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Beth Cudney: focus on AI rapid development, where I think Aimee hit the nail right on the head. How things are being communicated.

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Beth Cudney: I think.

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Beth Cudney: isn't quite necessarily in line with the message that leadership is trying to send, at least hopefully, that's what's happening. And with that change so much is getting lost in the message where I think

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Beth Cudney: most people within the organization are seeing the focus as it's all on AI, it's all on rapid change, not necessarily the focus that it's on, how do we embrace these tool or use these tools so that we can better meet customer needs and expectations.

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Beth Cudney: So I think that's a large part of it is just because it's it's pretty overwhelming to most people, right? Whether it's at work or anywhere else, with the amount of data that's coming at us, and what's changing so quickly.

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Richard Uphoff: Yeah. And we're gonna come back to that point, too, because I do want to go a bit deeper on technology. I know all of our panelists have different. Ask different exposures to various pieces of technology, whether it's, you know,

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Richard Uphoff: microchip manufacturing electronics or Beth, you being in academia. So I want to definitely come back to that. But let me get get you to chime in here, Russ, on this I know in the sidebar. I love a good book recommendation, and you mentioned in the sidebar a book that talked about habits of unsuccessful leaders. So we've talked about a couple of things, you know resistance to change, you know leaders themselves

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Richard Uphoff: are having to adapt to change too, and so may not be, you know, exemplifying it or setting a good example for dealing with change themselves. But what do you see like? Talk more about that, like you know how the habits of unsuccessful leaders can have could potentially be

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Richard Uphoff: part of the explanation. Behind these results.

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Russ Snyder: Okay, I think, I think the one thing that is challenging leaders today and all across the world is, I think, we have the most uncertain business environment that we've had in a long time.

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Russ Snyder: Starting with the pandemic, starting with the exposure of supply chain issues, the new technology disruptors that are everywhere. And many of these leaders aren't young folks, and they didn't grow up with technology change and

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Russ Snyder: and I, so so corporations are faced with so many other

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Russ Snyder: issues that I think quality has become, you know, very good. In most companies it's become a lower priority on the list of big priorities and investment is such.

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Russ Snyder: A lot of investments going into AI build out and applications for AI. And I know I've talked to a number of colleagues where managers have just said

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Russ Snyder: to their people, just do something with AI. Okay? And it's just it's it's not focused and it unaware and untrained. And so as managers and leaders are dealing with all these things, I think it brings me back to to the book. Why smart executives fail! And I called out a couple of habits there.

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Russ Snyder: one of which is leaders who've grown up in an organization, have lived within the culture and the boundary conditions of that of that organization, and they have often had all the answers. And they've been the answer person. And I think when there's so many different things disrupting the normal operation that they don't, they no longer have the answers.

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Russ Snyder: The second thing is the second habit that I think that leaders fall into is

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Russ Snyder: is that they? They rely on what's worked in the past.

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Russ Snyder: And when you, when you think you have all the answers, and you rely on everything that's worked in the past. Then oftentimes you're not listening to what the organization is telling you. You're not listening to what customers are telling you

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Russ Snyder: and you you get behind. And oftentimes, you know, I think, as far as leadership goes, they need to embrace some different tactics, especially in this age of disruption. And you know I really talk about humility.

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Russ Snyder: humility, and curiosity as 2 of the key tactics for leaders to start embracing information from their organization and to adapt and listen to some other alternatives to the way they do things. And I think you know, when you're doing that, I think you may see leaders change somewhat, and they may develop more of a culture of their leadership committees and executive staff to adopt some changes in their organization.

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Richard Uphoff: Great. Yeah, that's, you know, such an important concept. Russ, you know this idea of humility and curiosity, because obviously, as we as leaders are faced with these changes and faced with new technology and faced with these disruptions to our business right? It's hard to admit that we don't know, or it's hard to admit that. Hey? We're unfamiliar with some of these tools as you know, as

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Richard Uphoff: I think, Beth said. Right like, how do we embrace these tools right? Well, if leaders themselves are afraid to embrace the tools or don't know where to even begin to embrace the tools like that can be, you know, a quite a humbling experience. Right? And so it's okay to sort of talk about that share that right that can go a long way towards helping others embrace the changes that we're all

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Richard Uphoff: we're all experiencing. So again, I want to bring this back to like actionable insights for members of the audience here.

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Richard Uphoff: whether it's you know, as as Aimee said, right? Trying to just

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Richard Uphoff: measure things that are harder to measure or met, you know. Communicating the linkages between product quality,, service quality, or, as you know, Beth was saying, like you know, embracing the tools, you know, overcoming your own resistance to change?

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Richard Uphoff: Or, as you were saying, Russ, you know, like, how do we just do something with AI? Or how do we listen to what the organization is saying what the technology and the world around us is saying. So how do we do that, Russ? You mentioned, you know, barriers and disruptors. So maybe as we kind of pivot to the next slide.

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Richard Uphoff: We can start thinking about all right. So what do we do about this? Right? We have talked a little bit about like, why we have this problem. What are some of the reasons behind the

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Richard Uphoff: the data being as it is, but let's talk a little bit more about some of the other things that are getting getting in the way I'll just mention, I know here at Vanguard you know, we're experiencing a lot of change. We have a new CEO that was installed last year. We have a new division that's being stood up. A lot of people are being moved around. The organization moved into new roles. So there's lots of change.

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Richard Uphoff: lots of disruption. But you know, this slide again key insight in the report is

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Richard Uphoff: the question, what are the challenges faced by your organization and adapting quality programs to meet the needs of your entire workforce? Right. And so, it lists, you know, what are some of the top 5 challenges and what's interesting to me, so I want to get everybody's take on this. But what's interesting to me

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Richard Uphoff: is the fact that you had a lot of C-suite and vice president level folks responding to this survey. So this is a pretty good representation, not only of industries around the world, but also different roles within the organization.

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Richard Uphoff: So let me start with you, Beth, like in your in the sidebar you mentioned,

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Richard Uphoff: you know, this idea of the skills gap and you know the speed with which technology is evolving and some of the misalignments between culture and tools that can occur, like, I know, in our example. Right?

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Richard Uphoff: The Copilot was just introduced throughout the organization as a tool and there was, you know, certain sort of trainings that were provided, and whatnot. But how do you? How do you? Can you speak about that? Can you speak to,

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Richard Uphoff: you know, either skills, gap challenges or just this connection between tools and culture of an exist? You know, you have a tool that may be brand new to a culture. And yet the culture has been in place for a very long time, like what are some things that leaders can do to kind of overcome those barriers.

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Beth Cudney: And I think this is again, you know.

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Beth Cudney: we're gonna hear a lot about AI, but it is such a rapidly changing environment. And it, it's funny. So, I I spoke at the ASQ World Conference, and my topic was around AI. We had about 225 people that were in the room, and I asked people just briefly, you know, and this is,

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Beth Cudney: you know,

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Beth Cudney: just a quick survey I did there, "How many of you have in your organization have some sort of policy around AI?"

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Beth Cudney: and out of 225 ish people, I'd say less than 10 were were able to raise their hand

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Beth Cudney: right? So things are changing so quickly that

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Beth Cudney: trying to keep up with technology, how you know how you're going to have corporate policies to make sure information is safe.

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Beth Cudney: You know, I'm reading in the news. There's, you know, people losing jobs because you're putting

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Beth Cudney: proprietary information into chat, gpt copilot, or you know, whatever it might be, into some AI engine. And you know, not knowing how AI works.

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Beth Cudney: That that skills gap is is very difficult.

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Beth Cudney: So as things are changing so quickly, we do need leaders that are able to address that right and say, this is coming. This is how we're going to use this technology. And I'm gonna go back to Aimee's response on the on the previous question.

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Beth Cudney: the communication that senior leadership has to everyone within the organization, you know whether they're embracing it or not. I'm more on the embrace it because people are going to use it.

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Beth Cudney: But then how do you make sure that people are using it appropriately? So when they're having Town Hall meetings, they're they're working with all levels of the organization, explaining what the most appropriate tools are, how it's going to be used, how it's going to help the organization meet customers expectations. So they're linking it to quality. And it's not just about as Russ said, go use AI, and it can answer your question.

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Beth Cudney: We need to be able to, to, you know. Talk to our employees at all levels, and and make sure they understand what's acceptable, what's not acceptable.

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Beth Cudney: And that's where that skills gap comes in coming from the educational side. We really have to embrace it, because if I'm not teaching my students how to use AI ethically how to use it responsibly, then I'm doing a disservice to my students and future employers.

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Beth Cudney: So finding ways to, I think, kind of cross between those those different boundaries, to make sure that

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Beth Cudney: everyone knows exactly, not exactly, but how it works, where the information is coming from and how they can use things most appropriately. It still goes back to that junk in junk out

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Beth Cudney: if you don't know what you're doing with it.

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Richard Uphoff: Yeah. So what I'm hearing you say, Beth, and this is maybe for our audience here. Right? If if you are not feeling like if you're feeling like you haven't been given a lot of guidance, or you're feeling like the rules have not been laid out, or, as Russ said, you know you're just given this tool, saying, Hey, do something with this. You're not alone, right? Because,

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Richard Uphoff: as your your

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Richard Uphoff: World Conference session would indicate, right? Like, this is the minority still of those of us that are asking these questions, thinking about these issues, trying to overcome and anticipate how these things gonna impact how we measure quality, how we think about quality, how it can help improve quality. So again, yeah, if if you're feeling you know, like, you're you're behind the curve. You're really not judging by by that that data point.

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Richard Uphoff: So and I, wanna I wanna come back to to you, Beth, here in a minute, because I know you're at a conference now in the EU

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Richard Uphoff: But maybe Aimee and Russ, and maybe Aimee we'll start with you, right? You've been right in industry, you've seen, and not only at your own organizations. But at other organizations, right? Sort of the leading edge of technology, the leading edge of, yeah, obviously, we're all talking about AI now. But if it wasn't, AI was the Internet, or it was some other sort of technological.

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Richard Uphoff: you know, tool, some tech tool that we're being asked to incorporate. But maybe, Aimee, let's start with you right? You've been kind of at the leading edge of some of these technology in the electronics industry like, how are you seeing these challenges being faced, and and what guidance can you give, or what advice can you give for our audience about how to think about this.

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Aimee Siegler: It's been really interesting, as my organization has rolled out. AI, because

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Aimee Siegler: the the I think there's 2 real lessons learned from our internal rollout that I, I think.

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Aimee Siegler: are are worth sharing. So.

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Aimee Siegler: and I missed this training. But we had training recently from our provider on using copilot. And

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Aimee Siegler: so during the training the

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Aimee Siegler: trainer showed an example where someone loaded the schematic for a printed circuit Board assembly into copilot and told Copilot to analyze the the circuit to determine whether it was meeting the design requirements. And if you looked at our internal policy

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Aimee Siegler: related to AI what this trainer was suggesting, we do to use this tool

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Aimee Siegler: fully violated our policies. So when you are implementing

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Aimee Siegler: a tool, you need to ensure that if you are part of an organization that does actually have a policy in place that you're communicating, that to the folks that are involved with using the tool and involved with implementing the tool in your organization, and even the people training the people within your organization for that tool. It's really important

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Aimee Siegler: that they understand what those boundaries are. So they're not training with examples that just violate your policy. Because if we're working on a customer's design, we do not want to load that into copilot. That would really be a really bad thing. So, understanding how much you need to communicate and who you need to communicate it with can be really important.

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Aimee Siegler: The other thing that we found internally is as we've started to. We have our own internal

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Aimee Siegler: platform called Benchbot, which our little robot is cute and and fun. But we have our

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Aimee Siegler: global quality management system documentation available on Benchbot. So if you need to search for

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Aimee Siegler: how to do something in accordance with our global requirements, you can search that on Benchbot, and it'll return the documents for you, however.

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Aimee Siegler: because one of our facilities

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Aimee Siegler: had their documents loaded into benchmark as well, and our bench. Bot does not take into consideration our active directory when returning results.

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Aimee Siegler: Anyone searching for documents on how to do things now has the documentations from from this site

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Aimee Siegler: being shown to them as a possibility. And it's really important to communicate within the organization around.

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Aimee Siegler: not just the acceptable usage, but what you might see in the results and how to ensure that you're not creating other problems. So when you look at.

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Aimee Siegler: you know our our

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Aimee Siegler: quality management systems, you want to think about unintended consequences. So one of our general managers saw a great document from this other site that had their documents and bench bought and said, oh, well, I'm just going to follow this document. Well, it's not part of their site. Qms, they can't follow it. So really making sure that you're communicating what's available within your AI

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Aimee Siegler: database, so that if the search results include something that isn't relevant to your part of the organization or can't be used by your part of the organization that you're clearly communicating that information with the users, so that they understand what kind of results may be returned. So in this case it's not a hallucination, it it is a real document.

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Richard Uphoff: Yes.

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Aimee Siegler: It's just things that they can't be using. So making sure that we're really

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Aimee Siegler: accurately communicating information on how to use the tools, because there's we've got some great projects going on. We have a facility that's planning to use recordings and taking images and comparing them to having AI compare it to what it's supposed to look like as a visual inspection. So it's

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Aimee Siegler: normally you would see that in things like Aoi, that's part of the printed circuit board process. But this is for finished products. So we're developing our own

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Aimee Siegler: tools using AI to be able to streamline our processes. So there's exciting things going on. And we just need to make sure that we understand

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Aimee Siegler: what the implications are, and any unintended consequences.

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Richard Uphoff: Yeah, that's great. So yeah, what I hear you saying is right. The 2 things that you mentioned the 2 lessons learned right? Number one

32:58
Richard Uphoff: providing you know, communicating the policy. And if you don't have a policy to set forth a policy or define a policy to give people the guidance, because, as we've all can agree right, these are super powerful tools. These can really help us, you know, provide step, change, improvement in our respective industries and companies, but

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Richard Uphoff: with a lot of cautions and precautions. So the 1st yeah, communicating the policy communicating sort of what the boundaries are. And then, as you said Number 2, really making sure that

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Richard Uphoff: people know to check the work right? Check the answers, verify that what you're seeing is really applicable. I know I'm starting to see disclaimers now on the bottom of some of these, like, you know, may provide, you know this tool may give you false answers or hallucinations, or whatever. But you know you made the distinction that, hey? It's a right answer, but it's not applicable to the problem we're trying to solve, and then also helping

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Richard Uphoff: others think about like, make sure that we're not, you know, introducing new problems when we're trying to solve, use these tools to solve other problems. So so Russ, like from your experience, like in you know, microchip manufacturing. And then also seeing other companies. In that space like, how do you see these challenges? Being faced by organizations and maybe thinking about.

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Richard Uphoff: You know some advice that we can provide the audience for how to again strike this balance between utilizing the tools, but also mitigating risk.

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Russ Snyder: I'll deviate a little bit away from AI. You know, we, I managed a number of different factories in electronics manufacturing.

34:46
Russ Snyder: I think that if you're trying to get some new tools or implement some new tools, I think you need to show management what problem you want to solve

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Russ Snyder: financial benefit of doing so, and some of the things that we did were oftentimes in your industry. There's oftentimes state of the art sensors

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Russ Snyder: test and measurement equipment that may give you better analytics on your product than you may have today.

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Russ Snyder: And when you have that, a larger data set of much more inputs, I think what we found was we implemented a number of different machine learning algorithm at our final test. That would help us correlate some of the incoming components with some of our quality, our yield issues as well as help us improve, yields

35:45
Russ Snyder: product that we may have been rejecting. So while the big focus is on AI machine learning algorithms within the factory and with the factory data sets that you already have can be a huge benefit. And there's a financial benefit of implementing them as well. And we started implementing some of these tools, probably

36:07
Russ Snyder: so found found great success and perpetuated it across different factories. So you know, technology and technology change. You know, maybe there's Non AI where you can actually get some tangible results and financially prove to your management team that the financial benefit of doing so.

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Russ Snyder: So that's what I would say from our my background, Richard.

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Richard Uphoff: Yeah. So what I'm hearing you say Russ is like, don't be dazzled by the new tools necessarily, that sometimes it can be just getting back to basics with the data and the tools that you already have. And this is maybe a supplement to that.

36:54
Russ Snyder: That's correct, that's correct. Yep, you have, as all of us have, a big data set, and whether we're utilizing it or not, and AI can help with that. But I think also some machine learning algorithms can help with that. The other thing we found is that AI may help you pick the right machine learning algorithm to analyze your data.

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Richard Uphoff: That's great. Okay?

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Richard Uphoff: All right. Well, thank you. I know we've got about a little over 20 min left, and if we can go to the the next slide. This is has some interesting information in here. But let me come back to what we talked about earlier. I know, Beth, you're at a conference in the EU. I'm curious, you know, when you what you're hearing.

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Richard Uphoff: right as it relates to some of these issues? Either you know, how do we balance risk with you know some of these improvements or the desire to improve quality? How do we, you know leverage or guess. Find this trade off. How do we balance

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Richard Uphoff: this idea of managing risk? Managing quality, like, what are you hearing? There in in Oslo.

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Beth Cudney: Yeah, it's it's interesting. Not to jump back to the the AI perspective. But we did get a statistic at the start of the conference today. And I, I wanna say it was

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Beth Cudney: close to 60% of the presentations that are at this conference close to 60%. Had AI related to something.

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Beth Cudney: And

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Beth Cudney: 1st and foremost, and so there's definitely a lot of conversations about how you can use AI to improve your quality. But then, also balancing the risk. So one thing I'd like to kind of come back to is, I mean, I think, a big part of it that is in the conversation is, how do we, upskill? So most organizations are looking at AI to handle a lot of the

38:47
Beth Cudney: the trivial menial tasks. So we can take that away from, you know, employees, and then they can focus their their brainpower on the more critical issues and really drive the the massive changes that they really need to change. So

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Beth Cudney: seeing how we can take the operations and the leadership perspective to upskill individuals, so that again, they can focus on what's important. And part of that upskilling also goes into what we've been talking about with the risk of balancing it.

39:16
Beth Cudney: Anything that you put up.

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Beth Cudney: whatever you know you're using, ChatGPT, Copilot, you know you name it. If people don't understand what they're doing, then they don't necessarily know if it's public. If it's private. I could be using a you know where I'm at. My university pays for a we've got our site license. So I know I'm within a firewall. But that still doesn't prevent me, because there's no poke oak in place from uploading sensitive information

39:46
Beth Cudney: right? There's no checks and balances necessarily within that system. So kind of going back to the the leadership's role of encouraging people training people. But then also explaining, this is what we need to do, and then take it back to the quality perspective, because leadership

40:04
Beth Cudney: has to make quality a priority. But then it's, I think, back to Aimee again, talking about the communication. And how do we frame this as a way that we need to make sure we're we're protecting any intellectual property that we have, we need to balance the risk.

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Beth Cudney: And we need to use it back to Russ's comment, which was also excellent about, you know, how do we use it? Whether it's selecting machine learning algorithms helping to make our job easier. You know, helping to analyze some data to identify trends that we not, we may not have noticed necessarily within the data.

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Beth Cudney: So I'm working with different organizations as well as

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Beth Cudney: how can we use AI to help us identify things with our value? Stream maps that, you know, every time we look at a value stream map, any of us are gonna

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Beth Cudney: have the same data in front of us, but we're going to interpret it slightly, differently

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Beth Cudney: human. They'll make mistakes. So it's it's almost like using it. More of a as a 5th team member to help

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Beth Cudney: help us come up with different ideas. Brainstorm. So there we're we're not leaving any rock unturned.

41:07
Richard Uphoff: Yeah, that's great. Yeah. And again, it all comes back to obviously leadership. But also this idea that you mentioned about, how do we, upskill. And what are the skills gaps that we're trying? Because even the tools can help close the skills gap. But you know, again, as Aimee pointed out, right. We have to make sure that we have those guardrails in place.

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Richard Uphoff: so that, you know, like in her example, you don't have a trainer coming in, and you know, using it in a way that violates the policy that we want everybody to follow coming out of the training. So yeah, I think that's such a such an important point. And

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Richard Uphoff: you know, this idea about, you know, is leadership open to change themselves? Right? Would comes back to that. And how are we thinking about that? Like? So Aimee, you know, again, given your sort of background in electronics and thinking about

42:01
Richard Uphoff: Ssome of these changes with regards to the technology itself, like, how do you think about this balance between managing risk, managing volatility, but also managing quality.

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Aimee Siegler: I had to take that question actually, just just as a whole. So I'm going to step back from the electronics industry. And one of my favorite parts of ISO 9001, and I don't know what that says about me, that I have a favorite part of 9001, but it says it needs to be integrated with how you do business.

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Aimee Siegler: And I think that really captures the essence of that question.

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Aimee Siegler: because the things that we do to manage, risk in the organization the things that we do to demonstrate as leaders that quality is a priority, the things that we do to ensure that

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Aimee Siegler: we are embracing the changes that need to be made to improve our organization and our QMS. Not not just the QMS, but the organization as a whole.

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Aimee Siegler: those need to be integrated. It can't be quality over here and the organization over here. So we need to

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Aimee Siegler: ensure that our leaders are aware that

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Aimee Siegler: this can't happen in a vacuum. We need to look at the the risks to the organization.

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Aimee Siegler: not just the quality focus risks, but the financial risks and the supply chain risks and the bigger picture together, to be able to determine what we need to do as an organization to be successful.

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Richard Uphoff: Yeah, that's great. And I so you mentioned supply chain risk. So let me kind of bring Russ in here, because I know Russ, has thought a lot about supply chain risks. And obviously, you know, everything in the news today is about you know, tariff risks, social unrest, social unrest ongoing conflicts in the world, all of which are causing disruptions to supply chains. So

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Richard Uphoff: you know, when you're dependent on the supply chain, Russ, like, how do you work with those partners to help balance this idea of managing quality versus managing risk.

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Russ Snyder: Well, that's a big one, I think. If you look at my 1st approach to supply chain, disruption and risk is to

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Russ Snyder: simulate, simulate, disruption, simulate

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Russ Snyder: tariffs in the countries that you're in and understand what the financial impact is before it gets before you get there.

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Russ Snyder: You know, I've talked and I've talked a a ton of a ton of lectures on.

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Russ Snyder: you know, design supply chain to be able to withstand a certain amount of risk and make it resilient before you have the risk. Now, in this current age, of tariffs of different levels at different countries, you know the the way we began after Covid was to have suppliers in different countries and manufacturers in different countries, so that we weren't fully

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Russ Snyder: solely dependent on China as we were

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Russ Snyder: geodiversification. If you have a small operation, make sure, and you can't. Multi-source in multi geos, make sure that you understand your supply.

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Russ Snyder: how they can withstand some of these things.

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Russ Snyder: I mean, clearly.

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Russ Snyder: shoring is one of those one of those things. But oftentimes most products can't withstand the costs of bringing everything back to the United States. So you know, look around the globe, benchmark different countries, find countries that have capability

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Russ Snyder: and quality, and I'm going to flip it over from being proactive to being reactive. And I've had a number of consulting engagements where supply chain organizations want to know how to react better when they're

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Russ Snyder: and if you're in reactive mode. That's when you're going to have quality issues because you're going to have to find a supplier in a short period of time. And you can't do due diligence to validate that this supplier is going to your ongoing quality needs

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Russ Snyder: So

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Russ Snyder: bottom line, I say, is react less and design your supply chain to these issues and do not have get into the situation where you have to do an emergency supplier selection to handle whatever disruption it is. You have.

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Richard Uphoff: Yeah, that's great. And I think it's a good takeaway for everybody on the call. Right? That a good way that we as leaders can manage risk is through this anticipation. You've heard a number of the panelists talk about trying to anticipate

47:11
Richard Uphoff: and think ahead of time about creating guardrails, creating policies. Or I love what you said, Russ, about, you know. Simulate the disruption right like. Try to anticipate what those disruptions are. Gonna be so that you can think through them. And that's a way to mitigate mitigate risk, whether that you know impact or that disruption is gonna be some new technology, some new tool or

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Richard Uphoff: or just some other disruption, whether it's tariff or social unrest, or whatever right part of good

47:43
Richard Uphoff: you know risk mitigation is trying to do that scenario planning, trying to anticipate what might what you might face or what your partners might face, because, as you said, Russ. You know, we ourselves may be being appropriately reactive. But our important supply chain providers may not be. And so if we don't have those conversations, it's hard to anticipate that.

48:10
Richard Uphoff: So I know we've got a little over 10 min left, and I want to make sure we save some time for Q&A. I appreciate everybody's input thus far, and I've been watching the chat here. Cathleen actually brings up an important kind of reminder. Disclaimer that again, it's incumbent upon you as a leader or as a quality professional in

48:33
Richard Uphoff: your organization to find out, hey, that these tools may be okay to use if you're inside the firewall. Beth brought up the idea at her university about being inside the firewall versus outside the firewall and Aimee brought up the example about, you know, some kind of worst case scenarios where proprietary information might be getting shared in a way that is not appropriate. So but Cathleen brings up this point that

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Richard Uphoff: yeah. Having some of these tools inside your corporate firewall may mean that it's okay to use

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Richard Uphoff: or maybe okay, to upload certain information, but not others. So again, important for you to check that out if you're with an organization that has some of these tools, or are encouraging you to use some of these tools. It sounds like Symantha, you are being encouraged to use the tools. And it as we've also heard before, it seems like your experience was that.

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Richard Uphoff: you know, it wasn't clear what it could be used for. So again gets back to the point that Aimee and Beth and Russ brought up about like, you know, making sure that some of these policies and procedures are in place.

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Richard Uphoff: especially if these tools are new, or make sure that the guardrails are clearly defined. For people that are being asked to experiment with these tools, you know, as Russ said, you know, just if you're being told, just go out and use it right like, make sure that you, if you're being asked that that you know what the guardrails are, and you know what the policies and the expectations are.

50:00
Richard Uphoff: So

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Richard Uphoff: As you know, as you enter other questions that might be in the chat again. I know we have representatives on this on this call from different industries around the world. Jessica's asking a question. About what tools the team would suggest

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Richard Uphoff: for RFMEA. Right? So or methods with RFMEA. So whoever, I'm not sure I know exactly what the Rn. FMEA is. But maybe Beth, Aimee, or Russ, if one of you can

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Richard Uphoff: chime in a reverse. Okay, reverse FMEA, all right. So maybe, Russ, let me start with you. Then, if we think about reverse FMEA right? And and this idea of you know simulating disruptions right can you speak to maybe other tools that the audience might be wanting to look into, to help with ways to sort of simulate disruption, or do some scenario planning to anticipate disruption.

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Russ Snyder: Well, we. We implement FMEA on pretty much everything at our factory before we launch a product

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Russ Snyder: not so much reverse, FMEA. But if you look at at managing risk by looking at what could happen?

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Russ Snyder: You know, don't just rely on an FMEA. We a model, a spreadsheet model that helps me predict risk of various supply chain configurations.

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Russ Snyder: And I developed a concept called a resilience factor. Now, if you look at FMEA, it ranks priority of issues. This was a different way of using predictive simulation to predict a resilience factor for various nodes on our supply chain. So there are other tools other than FMEA. That, I think can be more predictive

52:04
Russ Snyder: and analytical, based on data.

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Richard Uphoff: Great. Thank you. Alright, Randolph is asking the question, how do we ensure these tools are validated, and that the responses will be consistent, especially outside of easily verifiable tasks. So, Aimee, you were talking earlier about

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Richard Uphoff: right? The importance of I'll call it pre validating. Some of these tools before people are being asked to implement them. But how do you like? What are some other ways that we can ensure that these tools are validated and that those responses are consistent, whether in your example, right? It's it's either in, in, in internal, or with the trainer, or across maybe lines of business within the same organization, or different plants within the same organization.

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Aimee Siegler: That's actually something we're looking at within our organization right now, because we have facilities that are

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Aimee Siegler: manage manufacturing class 3 medical devices and anything that is

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Aimee Siegler: quality system regulation requires that we validate software that is used to replace something that was previously done.

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Aimee Siegler: I'll call it manually so.

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Aimee Siegler: From that standpoint you should be able to use the same methodology of IQ, OQ, and PQ. In relationship to the validation of the system.

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Aimee Siegler: One of the things we've found is really helpful and important when you're looking at communicating about systems is actually labeling the status of validation. So when we have, for example, power bi that we use for dashboarding and visualization of data and

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Aimee Siegler: the dashboards that I own for Kappa and audit findings have been validated, and it's labeled as such versus some of our other dashboards have not been validated

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Aimee Siegler: yet, so the label says very clearly that they're not validated. So as you go along the path of using

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Aimee Siegler: AI tools to within your business. It's really important until they are validated that you are

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Aimee Siegler: making sure that it's it's clear whether or not they're validated. So you understand what they can be used for, as far as a methodology for that. Beyond the IQ/OQ/PQ. There was a presentation at World Conference that

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Aimee Siegler: had just enough information, I would say, to be dangerous about how to validate an AI system. It's really important to understand what data your system is being trained on

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Aimee Siegler: and being able to develop test cases that would test the ability of your system to provide the the output to you hallucination free. So it's not developing things

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Aimee Siegler: that don't actually exist.

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Aimee Siegler: And I think that the traditional validation framework is actually really helpful. Because if you

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Aimee Siegler: frame your requirements from a user standpoint. So you have a user specification. And then you also have a system.

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Aimee Siegler: a system requirements document that defines what's required for the system. You're validating against those documents. So

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Aimee Siegler: when you think about

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Aimee Siegler: the outputs in relationship to the user requirements and the system requirements, it makes it easier to think about, how do we develop the questions and tests that we can validate our systems.

56:03
Richard Uphoff: That's great. Thank you. Alright, I know we've got about 5 min left. I want to be mindful of everyone's time here. There's some great questions coming in the chat. We're not going to be able to get to all of them. Otis is bringing up a question about Quincy, which is ASQ's new AI tool.

56:19
Richard Uphoff: Devraj has got a good question in here, but Jonathan's bringing up an issue. Beth, I'm going to give you the last word on this in the last couple of minutes here. But, Jonathan, this is not Jonathan's question exactly, but he's bringing up the issue about regulators. We haven't talked about regulators yet, can you? Maybe in the last couple of minutes here, just speak to how we might think about some of these issues, managing risk, as it relates to regulators that whether it's medical device regulators, food quality regulators.

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Richard Uphoff: How best have you seen or how? How should we be thinking about interacting with regulators?

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Beth Cudney: That is a really great question.

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Beth Cudney: I haven't seen companies necessarily yet doing it quite well, and it's so funny because you mentioned Quincy, and this is one of the things that I if we had time, I did want to bring up,

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Beth Cudney: because I I think that's going to be one of the

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Beth Cudney: the case studies that a lot of organizations are going to go to, because, as we're looking at different systems, the way Quincy was developed by ASQ from a regulatory standpoint. It is

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Beth Cudney: ASQ, if people are not aware of it, took only the ASQ Body of Knowledge. So, if you look at all the other large language models, it scraped everything from the Internet. So, you have incorrect information. You have things that are wrong, right? And one of the great things about Quincy is, it took

57:43
Beth Cudney: validated information that's owned by ASQ, so we know it's good information, right? So from a from a verification validation standpoint, starting with that as a base point, makes it much easier to make sure you're getting accurate information.

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Beth Cudney: Otherwise, understanding where it's it's coming from everywhere else. So from a regulatory standpoint, that's gonna gonna obviously help because it's gonna use the standards that you know, based off of whatever type of standard you're trying to align with making sure that you're following that. That's going to be essential because you have pre vetted information out there that's being used to develop that information.

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Richard Uphoff: Yeah, that's great. Yeah. And I think speaks to the curated nature of this information that the models based on. So again, you all have spoken about the importance of.

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Richard Uphoff: you know, knowing where this information is coming from, and and understanding the risks involved there and then, I think the last point I'll make, too, is like, I think, in a lot of cases like Regulators are trying to figure this out. You know, the Regulators themselves aren't understanding exactly, you know, not only the tools, the underlying technology, or how they can affect or impact the industries that they're responsible for. So I think that's important to

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Richard Uphoff: keep in mind as well. So anyway, I know we are getting up on time. Here I am gonna say one last thing here before I turn it over to Brian

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Richard Uphoff: to close us out. So again, thank you all for the engagement. Thanks to our panelists, this has been great discussion. We're not going to get to all the questions in the chat, but one thing I will just kind of mention again, back to the report. If you haven't seen the report yet, please take a look at the report. Tons of great insight in there in the overview. It talks about these disruptions, and one of the things that it points out in the overview is that

59:31
Richard Uphoff: a common thread for success is practicing effective problem solving. And I will be back in September as part of the Webinar series presented by ASQE to talk about problem -solving. So stay tuned for more information on that that should be again linked back to this report. So with that, let me turn it over to Brian to close us out.

59:52
Brian Scarpace: Excellent, Richard. Thank you so much. I wanna thank Beth, Russ, Aimee, thank you. This was fascinating. A lot of great content. Great insights. We really appreciate everything you did for us today. Couple of items like I mentioned in the beginning, a recording of our

1:00:07
Brian Scarpace: panel discussion today will be made available to you after the call, and also the slides. If you're interested in those, and be sure, just like Richard said earlier, be sure to download our report, the Insights on Excellence, and maybe think about some of the questions that are important, how they apply to your organization, and think about some of the discussion we had today, and I also wanted to make sure that you know that having attended today, you'll receive our RUs. And then finally, Richard, thank you for mentioning this, too, if you

1:00:32
Brian Scarpace: could please help us with it, we're gonna have a survey in the chat. This really helps us out, drives the direction of our content to have uh, great panelists like we had today and moderators. So, thank you all for that. But if you could please help us out and fill out a survey, we really appreciate it. Thank you again. Thank you everyone for your membership, and thank you for joining us today. We hope everybody has a great day.