

Holistic Accessibility Management and the Banyan Tree - ACCESS 2024 - 3Play Media

[00:00:00.11] SOFIA LEIVA: All right, we'll go ahead and get started. Welcome and thank you for joining us at ACCESS 2024. My name is Sofia Leiva and I'm on the marketing team here at 3Play Media. My pronouns are she/her and I'm a Latina woman with long black hair, wearing a green shirt.

[00:00:20.57] Before we dive into the discussion, I'd like to go over a few housekeeping items. This presentation is being live captioned, and you can view those captions by clicking the CC icon in your control panel. This session also features ASL interpretation, courtesy of Deaf Services Unlimited. Please feel free to ask questions throughout the presentation using the Q&A window or chat, and we'll compile them to answer at the end.

[00:00:52.97] Today, I'm happy to welcome you all to the session, Holistic Accessibility Management and the Banyan Tree. Today, we're joined by Dr. Sambhavi Chandrashekar, or Sam for short, who is the Global Accessibility lead at D2L. Thank you so much, Sam, for being here today. And I'll pass it off to you for what I'm sure will be such a wonderful presentation.

[00:01:21.93] SAMBHAVI CHANDRASHEKAR: Thank you, Sofia. And thank you, 3Play Media, for having me. And hello to everybody who is present here. I'm not sure how many of you have seen a banyan tree. There's a cartoon picture of it on my slide that is showing now on the screen.

[00:01:46.38] Banyan trees typically thrive in hot tropical climates. Think India. They are not cold hardy, so you can't expect to see them in Canada. But in the US, you can see them south of Miami. But I've seen a lot of them growing up. And I have played, climbing up the roots and sitting on the branches.

[00:02:11.38] We'll go back to the banyan tree towards the end, but now for some serious business. Here's a video clip for you from the 1990s. I'll play it.

[00:02:25.63] [VIDEO PLAYBACK]

[00:02:26.05] - I now lift my pen to sign this Americans with Disability Act and say, let the shameful wall of exclusion finally come tumbling down. God bless you all.

[00:02:38.93] [END PLAYBACK]

[00:03:06.76] That was George Bush in the video signing the Americans with Disabilities Act, called ADA in short. Most of you would be familiar with the ADA. For the past 34 years, ADA has been the guiding star in the US for accessibility as a recourse for advocates and those with lived experience to demand access, where it is due.

[00:03:36.31] Until recently, ADA worked purely on the grounds of discrimination. It acted as-- I mean, it still acts as a vehicle for-- I'm sorry. It acts as a vehicle for individuals to claim that they are facing discrimination on account of some human difference.

[00:03:56.76] It could be color. It could be race. It could be gender. And disability is one of the human differences listed under ADA. A student, for example, could claim that the learning material provided by their college is not accessible to their assistive technology, and that would constitute a ground of discrimination to take their college to court.

[00:04:22.95] ADA has developed technical teeth now. They have mandated conformance to WCAG 2.1 AA under the new Americans with Disabilities Act Title II Web and Mobile Accessibility rule. It's a new rule.

[00:04:41.41] And for those of you who are not in this space, I can give you some background. So coincide with the 33rd birthday of ADA last year, the Department of Education and the Department of Justice sent out a dear colleague letter to the education community expressing their support for accessibility. And they also outlined the measures taken to support accessibility.

[00:05:09.75] And following that, they published a notice for proposed rulemaking, which is also called NPRM, in August 2023 to gather feedback from the community for their proposed Web and Mobile Accessibility Act under ADA Title II. This is directed at the state governments.

[00:05:30.14] Earlier this month, April 2024, the Department of Justice signed the Americans with Disabilities Act Title II Web and Mobile Acts accessibility rule. Who comes under this now? Public schools, community colleges, and public universities from under educational institutions come under this rule. They will be required to make their websites and mobile applications accessible as part of their ADA obligations.

[00:06:02.44] The rule-- or rather as part of the ADA obligations of the state and local governments, this rule has hardcoded WCAG, or Web Content Accessibility Guidelines 2.1 level AA, as the technical standard for state and local governments. However, as a saving grace, as I would call it, they also state that WCAG 2.1 is just the floor, and institutions could align themselves with higher versions of WCAG as they emerge.

[00:06:35.80] I call it a saving grace because locking down a WCAG version in a regulation is not good for people with disabilities. But luckily, it's not so. But even simply based on discrimination, suing under the ADA for accessibility has always been happening. In fact, it has turned into an industry, I would say.

[00:07:04.40] Last year, two blind students sued the Los Angeles Community College District. They claimed that course materials, web-based learning platforms, and library materials, among other resources, were inaccessible when they tried to access it with their assistive technologies during their studying at district campuses between 2015 and 2018. Imagine.

[00:07:40.33] They also called out some professors who allegedly told them they could not attend class because they were blind. The jury concluded that the district violated the ADA in 14

different ways and awarded the students \$240,000 in damages. There's one point, of course, about ADA. It focuses on content accessibility. There's more to accessible education than content, and we must keep that in mind.

[00:08:16.42] During my talk, I might lean more on education and talk from that space, but you could apply many of these things about accessibility in other spheres as well. So if we look deeply into this situation of being sued and inaccessibility, or even other similar situations leading to court cases based on lack of accessibility, we can see that at the foundation of it all, there is a lack of an inclusive mindset.

[00:08:57.24] What we need most fundamentally is an inclusive mindset. This is about nurturing an organizational culture of inclusion. Disability and accessibility must also become an integral part of the DEI efforts of every company, I would say, not just educational institutions. Quite often, this is not the case.

[00:09:23.06] The mention of DEI only brings to our mind gender, race, color, and such. I want to mention here about something we practice at D2L. It's called IDEA, I-D-E-A, and that's how we brought accessibility into DEI. This is quite popular, even in other places, other companies.

[00:09:46.64] But this is about including disability DEI initiatives. I'm also a big fan of inclusive design. So I'm going to talk-- from a perspective of developing inclusive mindset, I'm going to talk about what inclusive design is and how IDEA can be practiced because inclusive design is a path to making things accessible.

[00:10:15.98] So I'm closely connected with the Inclusive Design Research Centre in Toronto, which is led by Dr. Jutta Treviranus. Jutta has mentored me since 2005, and I taught in her Master of Design Program in Inclusive Design at OCAD University for five years before I joined D2L in 2017.

[00:10:37.23] So at D2L, we practice inclusive design. As an education technology company, what that primarily means is that we involve users of assistive technologies across our product process to create accessible technology. We include people with disabilities as needed during research, design, engineering, testing, release, even post-release support. We have in-house expertise. And what I'm focusing here is on the involvement of people with disabilities in anything you make.

[00:11:14.57] Besides in-house expertise, we also recruit for research participants from customer institutions, like learners, instructors, staff with disabilities. We also partner with Fable. You must be familiar with Fable. You must have heard their head of innovation and accessibility, Kate Kalcevich in yesterday's keynote session.

[00:11:37.64] I'm very fortunate to work with Kate in several forums, particularly the Accessibility Standards, Canada's accessible and equitable artificial intelligence systems technical committee. So I will walk you through IDEA from an angle of how we apply it in the education context.

[00:11:59.91] But inclusive design is essentially a philosophy. It is an approach. It leads to more accessible and inclusive ways of doing almost anything. As a matter of fact, last year, Kate Kalcevich and I did a panel for the American Marketing Association on applying inclusive design to marketing.

[00:12:24.10] So what is it all about? To begin with, we have to consider that people are different. What you see on the screen is little black dots. Let's say they represent the needs of different people. And they are as close to the center or as far away from the center, depending on how well their needs are met by anything. Let's say some software.

[00:12:57.51] So on the screen, these little dots have been separated into three different spaces. At the center is the circle with a lot of dots. Following that is a circle with slightly sparsely populated dots. And then at the end, there are very few dots.

[00:13:16.05] I mean, I've taken this picture from Jutta's work, and you could talk a lot about it. But what I want you to notice here is that whatever you have, even if it's a Word document you've created for teaching, it would work for a majority of people, say 80% of the people.

[00:13:35.07] There could be some-- let me say students. Some students may not be able to use that so well. There could be some students who just cannot use it at all. They just can't use the document at all. You can think of so many ways in which this can happen-- not having headings, not having color contrast, not having alternative text for images. But this is not a session to go over that.

[00:14:04.11] What does this bring to our mind? It brings to our mind that human beings are diverse. We have different needs. What came up on the screen is just colored silhouettes of different people, of different shapes, sizes, and abilities. So why do we have to worry about needs and different needs? It's because we are in the business of meeting needs.

[00:14:34.11] Whatever we do, whether it's a mother cooking, or a sports coach coaching their team, or it's an education technology product, or it is an instructor trying to teach, we always look to the needs of people, needs of those whom we serve, and try to meet those needs.

[00:14:55.64] Now, I brought up on the screen a picture. It's in two parts. There are four people. They have different shapes-- they're of different shapes and sizes. There's a little kid, an average-sized woman, a tall man, and a person using a wheelchair.

[00:15:13.78] We always talk about equality, equality about ensuring that everybody gets equal. What you see in that picture at the top is that this principle has been followed, and four bicycles that are identical have been given to these four people. Only 25% of them is able to use it comfortably. The person using a wheelchair just cannot use it.

[00:15:41.92] So the picture at the bottom shows how equity works. So while equality is about giving everybody the same thing, or identical things, equal things, equity is about seeking equal outcomes, regardless of what we give. It could be more, it could be less. But everybody should be on the road to success.

[00:16:06.50] So what you see in the second picture is personalization, personalized bicycles built exclusively to meet the needs of each of those people. When you do such one size fits one kind of design, which might not be feasible or practicable many times. But when you do that, ideally, everybody is getting on the road.

[00:16:31.67] And this would be the ideal accessible world. How do we tend towards that? We design for inclusion. We recognize diversity. We enable equity. Finally, we enhance access. So that's how we reach that place where everything is accessible.

[00:16:55.00] Here, I have a modification of Microsoft's Persona Spectrum. So there's a column of people representing visual challenges, a column representing hearing challenges, a column representing physical, and one representing cognitive challenges. At the top row are people with permanent disabilities who are always challenged in that respect.

[00:17:19.66] In the middle row are people with temporary disabilities. Say, for a period of time, they might have this. And at the bottom are people with situational challenges where due to something in the environment, they are not able to listen, or hear, or see, or understand.

[00:17:38.16] How this fits into the inclusive design picture is that-- remembering the first picture about people not meeting needs, being at the extreme, we have to remember that these are invariably people with disabilities. That's how the world works. They have not been designed for.

[00:17:58.00] So people with disabilities are at the extreme edges. We must start designing from the edges. What that means is anything you take up, you have to involve people with disabilities and design for them.

[00:18:13.09] Be constrained by their challenges. That gives you a lot of room for innovation. But it helps meet those challenges and meet their challenges. And the enhancement, or the amplification, or the wider impact part of it is that what we design for people with permanent disabilities works for a lot more number of people. That's what the truth is.

[00:18:40.28] So this applies to content as well. And we will now see-- before that, let's see technology. So after inclusive mindset, I will talk about compatible technology.

[00:18:58.60] Once we create the mindset in the organization, across the organization that people with disabilities are important, it's necessary to meet their needs. And any activity that is taken up should be towards that. Then, the next step is to understand that people with disabilities use assistive technologies. Not all of them. Not the same technology. But there's a wide variety of technology that sits in between the technology or content that you offer and how everybody else consumes it.

[00:19:36.53] So this is about supporting learners who use assistive technologies. And one big way this can be supported is by ensuring procurement of accessible digital technology. And by technology, I also mean content that produces technology and sometimes content that-- I mean systems that serve content, CMSs, even publication websites.

[00:20:03.50] So while procuring, if we make sure, as leaders, that those systems work with assistive technologies, then people in the organization, students and instructors in the educational institution who use assistive technologies, will be able to use those systems. And it could be a learning management system, it could be teaching tools, it could be learning tools.

[00:20:33.58] To enable independent and effective learning, especially for students with disabilities and teaching for instructors with disabilities, and training for instructors and trainers, their technologies need to be compatible with assistive technologies. And assistive technologies, by that, I mean screen readers, speech input programs, adaptive technologies that enable adaptive strategies for people who can't use their hands well.

[00:21:04.79] All of these fall under assistive technologies. There's a whole range for cognitive support as well. But essentially, any technology that is used over and above what is used by non-disabled people. And this is where WCAG mainly plays out. Because when a technology complies with WCAG, it is more possible that assistive technologies can-- people using assistive technologies can use them, although there is a usability aspect as well, which has to be kept in mind.

[00:21:41.14] So next, we will see accessible content. Because once-- and I told you, I'm going to talk from an education perspective. We have to talk about some space, right? I'm taking the education space, partly because I'm from a company that supports education, that provides technology that instructors and learners use to study.

[00:22:10.47] So accessible content. Producing accessible content and procuring accessible content, if you're not producing them yourself. These two are important. Institutions may also create their own content, so authoring tools also must be accessible.

[00:22:35.41] And also, we must remember, content is not just learning material. It includes even other content like assessments, feedbacks, discussions. They also create material. And here, it is important to support the creation and maintenance of accessible content.

[00:22:55.62] Content accessibility is also dependent on allied technologies and services. I can give you an example. At D2L, we have successfully leveraged AI for video and audio captioning in situ within our LMS, Learning Management System. Our system allows automated captioning of videos in multiple languages with editing of those captions as well and then downloading of the transcripts. Of course, a human in the loop is very important. All this is not unusual. In fact, 3Play is an expert there.

[00:23:32.12] But this becomes more usable when it is topped with an accessible media player, which could come along with the system, and a media library to host all the media for the institution so that it can be shared without duplicating and sharing one copy as a single source of truth. So everything is a system. Accessible content is a part of that system.

[00:24:01.30] Another point I'd like to emphasize to leaders in the context of accessible content is that while procuring content accessibility tools, people usually look at accessibility audit tools and remediation tools. They don't think of authoring tools. That's important.

[00:24:21.86] Even while thinking about remediation tools, it's good to go for a process rather than just tools, ad-hoc tools, because accessibility is a journey. To meet all the possible functional accessibility requirements, which means usability, we need processes and holistic solutions rather than just ad-hoc tools that just audit and remediate content.

[00:24:50.58] I can talk for hours about it, but let me just say that accessible authoring tools and accessible-- and tools for accessibility audit and remediation are very important in this context. But again, content is not the end of it all. There is also the delivery part.

[00:25:13.16] People might consume the content themselves, or it could be associated with a system where instructors or trainers are delivering education or training with the content as a support. So in this case, enabling and empowering the instructors or trainers in their practice is important to make that practice inclusive, whether it's teaching in an educational context or training in a company or organizational context.

[00:25:49.97] So here, again, we have this framework of universal design for learning, which speaks about creating content-- offering content in multiple ways to suit the different needs of different consumers and about using tools and processes inside the learning system that helps engagement and ways to monitor and to assess the knowledge that's gathered by the learners by helping them express their knowledge in different ways. All of these lend to ways in which different tools and systems can be made available to make this whole delivery accessible.

[00:26:45.31] We always hear about regulations-- Section 504, IDEA, so many regulations in so many contexts. They all have standards that back them, or they all ask for compliance with standards. Fortunately, most of the regulations around the world, I should say, for accessibility, they look to WCAG. Even if the regulation is from a different country, like Australia, or Europe, or anywhere, ultimately, they all point to the Web Content Accessibility Guidelines as a global source of truth for how not just content, even technology needs to be created, developed, to be usable by people with disabilities.

[00:27:44.68] One thing about regulations is-- the focus of ADA or other regulations is on ad-hoc accommodation to comply with the law. Do you have your accessibility conformance report? How many of those boxes have you ticked? OK, you're compliant? Fine. It's not fine because accessibility is a process. It's a journey.

[00:28:17.38] Regulations should, in fact, focus on accessible procurement and not just accommodation. Accessible procurement will holistically elevate the level of accessibility to bring it to the realm of meeting it in spirit rather than just in letter. Today, everything in learning is predicated on technology, so procurement standards are very important.

[00:28:46.75] The US has section 508. The EU has EN 301 549. But there's a difference. The EU procurement standards are for every single technology being used in Europe, whereas the Section 508 is only for institutions when they procure-- institutions that are funded by the government when they procure. But that's not very material here.

[00:29:14.82] Canada has adopted the harmonized EU EN 301 549 standards recently. I'm on the technical committee for modifying those standards. What we're hoping to do essentially is to move the approach from a deficit approach to a functional approach and create possibilities for use of technology, a range of possibilities that people can adopt regardless of being pointed at as blind, or deaf, or whatever.

[00:29:55.04] But until such time as regulations point to procurement, leaders must ensure procuring accessible technology themselves. And this becomes one part of governance, which is actually the main job for leaders. Sustained governance, that too. What processes are put in place once should continue and should continue to give the same or better results.

[00:30:25.70] So sustained governance involves developing and implementing policies, and plans, and procedures to enable accessibility practice, or the practice of accessibility. This is important because we live in a complex, adaptive world full of variability in human abilities and in technology capabilities. Nothing is fixed. So having goals like 100% accessibility is misleading. Accessibility is a journey.

[00:30:59.82] Another thing about governance is that there shouldn't be undue focus on change management, new ways of working, so everybody just-- change people's mindsets, change people's ways of working. It's effortful.

[00:31:18.78] Success lies in transformation. And transformation is about modifying the purpose and the belief of a business, even education. Change focuses on moving people from one way of doing to another.

[00:31:36.92] But transformation is about creating systems and processes in such a way that the people using them will automatically start doing things in a new way, in a different way. They won't even realize that they're doing that. But the outcomes will be the new outcomes.

[00:31:54.89] One of the tools that could help with sustained governance is accessibility maturity model. At D2L, we are in the process of developing our own accessibility maturity model. We have published a paper about that in the CSUN Journal on Technologies and Disabilities. 2024, we even presented about that at CSUN this year.

[00:32:16.10] In the education sector as well, there are efforts to bring about this concept of accessibility maturity. And I would definitely want to call out in this context Dr. Angela Jackson. She's from the University of South Dakota. She has, for her PhD, created what is called a four P model. She recommends working on policies, practices, people, and plan to improve campus-wide adoption of accessibility.

[00:32:45.87] She teaches this through EDUCAUSE, and she also consults. This is not a plug. I mean, it's just a resource for people, if they want to have this conversation and learn more about governance and maturity.

[00:33:03.24] Last point I want to talk about is community. But it is the most important point. Leaders must intentionally create a learning community and have ways to nurture that learning

community. It's not just enough If one organization has their learning community. They should connect with other learning communities. Because 25% of learning, even in educational systems, happens through peer-to-peer learning. It happens by peer-to-peer learning.

[00:33:36.93] Community, even in the context of AI, is very, very valuable. It's all about bringing people with like minds into a collective to learn from one another and to support one another. There are a lot of things we could do under this.

[00:33:56.73] At D2L, we have our own community, which includes the community of educational and other organizations that we have as our customers. There are a lot of resources, including an accessibility academy that we offer. But you can do anything you want. But having a community is essential.

[00:34:22.63] I want to tie all this up into a single slide where I have brought the seven points about mindset, content-- or inclusive mindset, accessible content, compatible technology, inclusive delivery and regulatory compliance, sustained governance, and collaborative community. All of those points I have brought into one slide. I'm just going to read them out for closing it, and then I will go to the next point.

[00:35:04.72] Nurture an organizational culture of inclusion. Support learners who use assistive technologies by ensuring procurement of accessible digital technology. Produce or procure accessible content and train content creators in accessible content authoring. Enable and empower instructors or trainers in their practice of inclusive teaching and learning.

[00:35:33.02] Monitor regulatory compliance in accessibility of technologies and content. Develop and implement policies, plans, and procedures to enable your people to practice accessibility. Intentionally create and nurture a learning community and connect with other communities in the ecosystem.

[00:35:58.23] My message to leadership is don't be bogged down with change management. Focus on transformative measures. Hold accessibility as your guiding compass.

[00:36:16.07] What that means is that, as leaders, you can create a combination of technology plus people as an infrastructure designed to make accessibility work across the organization. Although all regulations, or most of the regulations focus on content as the piece, remember accessibility is not just about content.

[00:36:43.51] WCAG has disproportionately caught the attention of the disability community, but accessibility is a holistic concept for human elevation, and it must be practiced as such at the leadership level. It's also important to remain networked with the environment because we are not isolated beings, but we are connected systems that thrive together.

[00:37:10.62] This framework would immensely benefit learners because where it is followed effectively, it would result in accessible learning experiences for them, whether they have a permanent disability or simply a temporary or situational disabling condition. And the framework gives educational institutions a meaningful way of making education inclusive.

[00:37:41.14] And finally, the banyan tree. So far, we saw seven critical aspects of accessibility implementation. I'm now presenting the cartoon banyan tree on the screen from my title slide. I also have a text box there, listing how each of those aspects that I discussed so far connect with seven key structures of the banyan tree.

[00:38:16.14] The root of the banyan tree. Like the roots, accessibility in education must be grounded in empathy, empathy for human differences, and the diverse needs that go with it. This is the strong foundation that feeds and upholds the entire education system.

[00:38:37.85] Needs must be met in a personalized manner. The focus should be on equal outcomes and not just on providing equal resources. Designing and delivering education to meet the needs of learners with disabilities makes the experience better for all the learners.

[00:38:57.32] The branches. The branches are like compatible technology. Or the other way around, compatible technology is like the branches of the banyan tree.

[00:39:09.61] An accessible education system must provide strong support in all directions to learners who use assistive technologies by ensuring that those technologies work compatibly with the learning technologies that are used. This is possible when the technologies are built in alignment with accessibility guidelines.

[00:39:31.62] Accessible content is like the leaves of the banyan tree. Pieces of content, like leaves, are constantly created anew, they last for a while, and then they are replaced. To remain usable by learners with disabilities, content must be created and maintained in an accessible manner.

[00:39:51.06] The sap relates to inclusive delivery. Like the sap of the banyan tree that runs through it and enlivens it, the methodology of teaching and the mechanisms of delivering ultimately give life to the system and make it real. So pedagogy, or ways of teaching, must be intentional. And they must include-- they must be inclusive in their curriculum, in their instruction, and in their assessments to reach all learners.

[00:40:24.36] The roots, the aerial roots that hang from the top, that is regulatory compliance because it supports the system. They help strengthen the system, and it helps mandate action that the players have to do. Compliance with regulations must be practiced with diligence, and the laws must be followed in spirit and not just by letter.

[00:40:51.71] Sustained governance is like the soil. It nurtures the system. The systematic support comes in the form of executive buy-in to begin with and then the creation of policies and resources to feed the processes that are essential for the sustained practice of accessibility.

[00:41:17.43] Collective nurturing is like collaborative community. And in the case of banyan trees, or other trees in huge forests, collective nurturing is a way their roots are actually interconnected under the soil. Even if one or two trees don't receive shade-- sorry, don't receive sunlight and cannot thrive, other trees pass nutrients to those trees. So collectively, different

organizations, different educational institutions can support each other and help everyone thrive as a system by maintaining this collaboration.

[00:42:02.90] Here, on this slide, I'm giving some details of my work and contact information. I'm sure this deck is going to reach you. Throughout the 20 years I've lived in Canada, I've engaged simultaneously with academia, nonprofit, government, and the ed tech sector. Disability inclusion through accessibility has always been my guiding compass.

[00:42:31.70] In the realms of artificial intelligence and accessibility governance, I engage with some Canadian government committees and international forums like 1EdTech and G3ict or IAAP. I would say my current interests are to promote accessibility as a leadership imperative, to advocate for the use of AI properly in education, and to work on ensuring the accessibility of AI productivity tools and enhancing the equity of decision-making systems based on AI.

[00:43:13.02] We do have some time. I look forward to any questions that Sofia is ready to throw at me.

[00:43:24.25] SOFIA LEIVA: Yes. Thank you so much for such a great presentation. I love the visualization of the banyan tree. I think it really helps to conceptualize all the key pieces of what holistic accessibility is.

[00:43:39.58] We have a couple of questions here already, and I'd love to encourage you all to also continue to chime those questions in the chat window or in the Q&A tab. And we'll try to get to as many as possible. The first question we have here is, what are some practical strategies for evaluating and selecting accessible technology tools to cater to the various needs and disabilities?

[00:44:05.62] SAMBHAVI CHANDRASHEKAR: Number one, involve people with disabilities. I'm going to talk about procurement process. There are a lot of talks, a lot of panels being held about accessible procurement. In fact, in D2L's annual conference called Fusion, Dr. Mahadeo Sukhai from CNIB and I are doing a talk on accessible procurement of AI tools and technologies.

[00:44:34.97] But regardless of which tools, which technologies, fundamentally, I would say that the most important points to keep in mind are in the procurement process, is there involvement of people with disabilities as players? They could be electronic systems that somebody creates a purchase request. It passes through NetSuite, going to the next, next, next person. It gets to security for security compliance. It gets to legal for legal.

[00:45:06.39] It should get to accessibility for accessibility check and pass before technology is bought. If that is done, then in companies, employees will not be left not able to use software that everybody else uses for expensing or for anything. And educational institutions, it's their life. Teachers should be able to teach with the tools that are bought, and students should be able to learn with the tools that are bought.

[00:45:41.55] Also during procurement, you could specify that the vendor should provide a sandbox which, if it's a university or college, students and instructors with disabilities could try it out. If it's an organization, employees with disabilities could try it out, checking the software, and creating a list of issues, prioritizing them, getting confirmation from the vendor that they will, in a timed basis, take care of those things. That's essential before procuring.

[00:46:17.55] VPAT is like a balance sheet. I'm not saying VPATs are made up. They would be accurate absolute truths, but the next moment, they may not be. So VPAT should be taken as the base-level indication. All these other things go to make up what is required.

[00:46:37.94] And one other thing I would say, when it comes to any tech vendor, assess the support that they will be willing to give subsequent to the purchase or procurement. Because when people with disabilities using the tech have issues, there should be a hotline. There should be a way in which the customer, or as customers, we are able to go to the vendor and get those things solved because assistive technologies keep changing.

[00:47:11.47] And also, products will keep having updates. So there will always be changes that are happening. Things will break. We need a system and a process to handle that. That's very important. I can go on saying more and more, but you can go to the next question.

[00:47:28.66] SOFIA LEIVA: No, I think that's a great piece of advice and things that are often missed in the technology evaluation process. So those are very important to call out. The next question we have is, in your experience, what are some common barriers or challenges that organizations face when attempting to scale accessibility efforts?

[00:47:52.23] SAMBHAVI CHANDRASHEKAR: When you say "scaling," in a university, it could be increasing the number of learners, right? Let's just take that example. So when you want to scale that, you would increase the number of courses, increase the number of instructors.

[00:48:11.09] So what happens is with new people coming in as players of the system, we can't always be sure how well-trained they are about accessibility, even whether they know about accessibility. This is a constant thing we keep-- I'm not saying facing. We have a way of handling that.

[00:48:31.16] During onboarding, there needs to be courses or inputs relating to accessibility and about the organization's approach and goals and how valuable accessibility is. There should be ways, training programs, or even collaborative sessions about or for bringing about a mindset, an inclusive mindset in the person. Because no amount of telling an instructor that they need to make their course content accessible is going to work unless they feel they need to.

[00:49:07.71] And for that, there's a very wonderful-- there's a really wonderful scheme that I saw in Deakin University, Australia, where I had gone to Melbourne for a panel. And there was a panelist, Jo Elliott. They have a system of reverse mentoring.

[00:49:24.51] Every instructor is paired with a student with a disability, and it's the student that trains the instructor or tells whatever needs to be told to the instructor. That's amazing. Now, Jo

is with Queen Mary University in London. I continue to keep in touch with her. We're doing another webinar in June in EMEA, but that point stuck so well in my head.

[00:49:49.77] So mindset is very important. And to scale up, you need to also enhance the use of technologies. Authoring tools are very important. You can procure, you would procure, you would collaborate with publishing houses. You need to be mindful of how accessible they are.

[00:50:12.88] Technologies that create content, they should be compliant with Authoring Tools Accessibility Guidelines, or ATAG, meaning if there is an editor-- mostly education system platforms have editors that pop up everywhere. You want to post in discussion, the editor comes up.

[00:50:31.36] You want to write a feedback, the editor, the HTML, or whatever the editor is, it comes up. So in all these cases, the editor should be able to author accessible content and media, of course. Any media that's being created, there should be a system for instructors or students posting on a discussion their own video or other videos.

[00:50:57.73] There should be training that these media, whether it's audio or video, must be closed captioned, and described, and ways of doing it, tools to do that. Even if audio description of videos is not possible, the way we handle it is we download a transcript, and then we populate the transcript with additional descriptions. That's an easy way of getting over the hurdle.

[00:51:31.55] SOFIA LEIVA: Thank you so much. We had a comment in the chat from Dawn Campbell from Accessibil-IT.

[00:51:37.32] SAMBHAVI CHANDRASHEKAR: Oh, OK.

[00:51:38.26] SOFIA LEIVA: She just wanted to share that she had never seen the image of people on the bicycle to explain equity and equality. Most common, it's a fence with children on boxes. And really appreciate seeing this new image for this.

[00:51:53.88] SAMBHAVI CHANDRASHEKAR: Thank you, Dawn.

[00:51:54.62] SOFIA LEIVA: Thanks for sharing that. The next question we had here is-- let's see-- about the trunk of the banyan tree. How do the core principles or values that guide accessibility implementation translate into concrete actions within the educational setting?

[00:52:17.35] SAMBHAVI CHANDRASHEKAR: Concrete actions would always come from leaders by way of budget, plans, policies primarily. Let me say top of it all is policies. And then plans to execute those policies, setting up of procedures, training the people, providing the necessary budget.

[00:52:41.22] I would say that just like the trunk of the banyan tree, the leaders I would say-- maybe next time when I speak, I will say the trunk is like the leaders, actually. We didn't have an analogy for the trunk, right? We just only had for branches. I don't think we had for the trunk. Maybe I get a good idea now. Whoever asked that, it's amazing. Thank you.

[00:53:04.00] So the trunk, that's holding and supporting everything, right? The system that you're building, it's going to help scale. It's going to help compliance. It's going to help everything.

[00:53:18.05] Just like a leader, you manage everything. You manage people. You manage the resources. You manage the systems, processes, how everything happens in the organization. So that's how, I think. Anything that leaders can do because it's going to produce great results. It's going to differentiate the organization in the market as well.

[00:53:43.46] Education institutions may probably get more people wanting to join them. So more learners wanting to graduate from there. Ooh, that's an accessible college. I want to go there. Not just because I have a disability, because I'm principled. I want to support, yeah.

[00:54:04.54] SOFIA LEIVA: Yeah. I think it's like trickle-down accessibility. When it comes from leadership, it will trickle down to the rest. We had a couple questions about acronyms that you mentioned, if you could give us some definitions. The first one was WCAG, and the next one was VPAT.

[00:54:21.61] SAMBHAVI CHANDRASHEKAR: OK. I'm sorry if I didn't mention that in the course of talking. I think I expanded WCAG, I didn't expand VPAT. So WCAG stands for Web Content Accessibility Guidelines.

[00:54:36.70] So the World Wide Web Consortium is an organization with global members. It's a volunteer organization where, I don't know, 300 to 500 companies globally are participating in creating standards, standards for various things. One of them is web content.

[00:54:55.91] And I say web content, but it's not just website pages. Learning happens on the web now. So any content created for learning, any system that's up there doing online learning, everything falls within that. So Web Content Accessibility Guidelines is one set of guidelines that-- I think the first version was published in 1999. And then the second version, WCAG 2, was published in 2008.

[00:55:26.21] Then it became 2.1 in 2019, 2.2 last year, October. The idea is that some number of criteria are added every time, criteria meaning what shows success, what shows that you are compatible, your content is accessible. Those are the criteria.

[00:55:47.18] Now, there is another thing called WCAG 3.0, which is going to be different from these in that it's going to have more of a functional component. WCAG is criticized as being very technical, only relating to the code. The usability is something we have to manage, whereas the 3.0, we will have more of that as well. It will make it more fuzzy, but it'll make it more real.

[00:56:16.84] And VPAT is related to WCAG in the sense that it's a template. It's a template for reporting how well you conform with WCAG standards. So a VPAT essentially will have all the WCAG criteria listed, and there'll be a column for every organization to report whether they support that criterion and, if so, how they support.

[00:56:45.12] And if they don't support, what is their exception? In our, whatever, admin tool, this particular thing doesn't have-- the image doesn't have an alt text, or something like that, which is stupid to have on a VPAT. You should just go put the alt text there. But I couldn't get a better example.

[00:57:05.23] So there are different types of templates. The ITI-- I think, International Technical Institute or whatever. Exactly, Tamara. Thank you so much. There is a page on VPATs, which gives all types of templates.

[00:57:21.54] So there is a template for showing conformance just with WCAG. There's one for showing section 508, which is WCAG plus some functional criteria. There's one for showing conformance with EN 301 459, Europe, which is like WCAG plus their own function, which is not very different from Section 508's criteria.

[00:57:44.58] There is an international. And D2L, on our website, has publicly posted at d2l.com/accessibility/standards, if I'm not mistaken. We post their audited-- I was going to say audited VPAT. We don't say audited VPAT. We say Audited Accessibility Conformance Report. The common usage is show me your VPAT, but that's not the correct usage.

[00:58:16.79] The correct usage is show me your Accessibility Conformance Report. VPAT is just a template. But in use, people use VPAT when they mean accessibility conformance report.

[00:58:29.31] So at D2L, we use the international template. Our Accessibility Conformance Report has three sections, one WCAG section, one Section 508 section, and one EN 301 459 section, particularly because Canada has also adopted EN 301 459.

[00:58:48.49] Yeah. Oh, my god, there's just one minute. OK.

[00:58:52.52] SOFIA LEIVA: No.

[00:58:52.78] SAMBHAVI CHANDRASHEKAR: I'll shut up.

[00:58:53.61] SOFIA LEIVA: No, no, no. You're good. That was really helpful to know, so thank you so much. Thank you, Sam, for a great presentation. And thank you, everyone, for asking some really great questions.