DARLENE MCLENNAN: Morning, everybody. It's Darlene McLennan here and it's quite strange saying "morning"; we normally offer our webinars in the afternoon. So I'm so used to saying, “Happy afternoon, everybody.” For those who don't know and have not joined a webinar of ours before, I'm Darlene McLennan and I manage the Australian Disability Clearing House on Education and Training, ADCET, and we're excited to be able to bring you this webinar called Accessibility and Automatic Speech Recognition with Echo360. Before I start, I want to pay my respects to the traditional and original custodians on the land on which we meet today, the palawa people, and I would also like to acknowledge the Tasmanian Aboriginal community who continue to maintain their identity, culture and their Aboriginal rights here in Tasmania and I want to pay respects to elders past, present and emerging. We are really fortunate today to have Cassidy Fein presenting for us. Cassidy is the Senior Project Manager of Echo360 and she joins us from North Carolina, hence why we’re doing our webinar at 11am this morning because, for her, it's 9:00 p.m. there and we really didn't want to make her stay awake until 11:00 p.m. We also have Jo Williams, who is the General Manager for the Asian-Pacific area of Echo360 on the line. She won't be talking, but she is here and just want to recognise her joining us as well today. For those who have just recently joined us and you want to have a look at the captions, you can actually click on the CC button on the toolbar which is either up the top or bottom of your screen. There's a little bit of information there on the screen at the moment on how to access the captions. But if you have any technical difficulties throughout the webinar, you can email us at admin@adcet.edu.au. The presentation should go for around 40 to 50 minutes. Cassidy said it probably won't take that long. She is really keen to answer people's questions. So, what we're going to ask is if you have any questions throughout the presentation, you can add them to the chat box or the question pod. You have a choice there to choose "all attendees" or, I'm just trying to remember what it's called, “all panelists and attendees” and that means other people can see your questions as well and it makes the webinar a little bit more engaging because, sometimes, some of our audience are smarter than us and can even answer the questions for us which is great. If you want to share your question with everybody, please choose that. I think that's about it. Thank you, all, for joining us. Now, I will hand over to you, Cassidy.

CASSIDY FEIN: Excellent, thank you so much, Darlene, and thank you all for the time this morning. I really appreciate it. I love speaking directly with new audiences so this is exciting for me, wild to do it here from my laptop. As Darlene mentioned, I'm the Senior Product Manager at Echo and I help oversee everything related to teaching and learning, so, really everything that a student or instructor would engage with on the platform. I have been with Echo for about five years now. So, it's really exciting for me to see a lot of these features come to fruition and work with a lot of these different audiences. For those of you that are not familiar with Echo360, we really are the only platform built solely for education and educators by educators. We have really crafted the platform to work and function and think the way that you already do today. We have a lifecycle that we like to present just to help explain how we think through when we are building new work flows or modifying existing work flows and we’re thinking about ways of adding to the platform in general. We always think through these different things that are always happening and should be more of a ply-wheel within the platform itself, everything from creating new media - we have a dedicated capture application called Universal Capture and we also support robust scheduling of captures and associations with class containers for easy access, through managing that media to enhancing it. We will obviously be talking a lot about transcripts and captioning which is a particular enhancement today. Sharing that media with individuals, groups, classes and the public ideally in as automated a fashion as possible, to actually tracking engagement through analysis of media itself. So, being able to see who is accessing the media when, at what points they're watching, where they’re possibly dropping off, what questions they are getting right or questions they maybe need more help with and, again, reusing all of that content and making it as robust and as useful as possible for your audiences. We have a lot of different tools we support within our classroom. You will see our classroom a little bit later tonight as we play through our interactive transcript tool, but you can also see here a bunch of other tools that we offer including engaging with different polling types such as image based polling. We also support live Q&A within our own classroom, very similar to Zoom's Q&A as well. Interactive note taking. You can see here, a student is taking a note and it will automatically time stamp both the moment in the video as well as the slide on which the student is on. So, if they don't remember why they made a note, if they are like me where I read email I sent six months ago and go and I’m like why did I send that, what was that about? You can go back and be brought immediately to the right moment in the video and the presentation. And of course, the ability to search across your content to find exactly what you're looking for. And then, on the analysis end, really helping to understand why students are doing what they're doing. Everything from key maps within the classroom or individual media to seeing individual students' behaviour around attendance, video views, Q&A activity, activity participation and notes as well. And finally, we also now support comprehensive video management. This is something we released not too long ago, I think six to nine months ago and something my team spearheaded so we're really excited about this. This is helping to organise, share and access content in a simple and intuitive way. So, being able to search and filter exactly what you're looking for, sharing from a single click to a different user, to groups, to different classes or even the public and doing this all from within your LMS, so a platform you’re comfortable with and a platform that you are probably in the majority of the day anyway. So, that's a little bit about Echo. I would love to now jump into a broader view of accessibility and of course, why is it important? So, when I talk to audiences at our different user conferences or even internally, I always like to bring up this image and remind people exactly what accessibility is. We just had our user conference actually in New York at Columbia University this past week and it was really great to speak with a lot of the heads of the accessibility departments of the various schools that attended and get their feedback around how they're helping to get the word out on their campus and work with different instructors and different groups on campus. So, why is accessibility important? At least one in five people in Australia have a long-term illness, impairment or disability, and even more, unfortunately, I couldn't find any numbers around this that were recent, but even more than that have a temporary disability as well. The statistic is nearly identical for the US and for the UK as well. It's generally around 19-20 per cent, at least around - this is pulled from the Australian Bureau of Statistics from 2016. In the 2010 census in the US, it's about the same. They are expecting even more within the 2020 census. I use this image comparing equality, accommodation and accessibility just to remind everyone, you know sort of, the differences. Equality being everyone is in the same room as the whiteboard, but not everyone can actually use it. Accommodation being one person has been given a ramp, another person has been given a block or a stool. But without those two things they wouldn't be able to use the whiteboard. The third is of course, I’m making sure the whiteboard is placed in a way that everyone can use it successfully. That's the difference in a visual way between equality, accommodation and accessibility. So, when we're working through and sharing accessibility, of course we're a global company, so each country has its own laws that we have to work with our legal teams to read through, to understand, then socialise with the various team members throughout Echo. Within the US, we have the ADA and section 508 of the rehabilitation act. Within the UK, we have the European Accessibility Act as well as updates to the equality act of 2010 which I will be discussing in further detail later on in this presentation. In Australia, there's the Disability Discrimination Act of 1992 and, of course, the more broader UN Convention on the Rights of Persons with Disabilities which a lot of these laws, at least I know in the US, helped to draw from. Then of course, throughout all of this, and we at Echo strive to adhere to the tightest definition of these laws, web accessibility is moving towards a more accepted global standard which is always great. WCAG 2.1 is the latest standard. This stands for the Web Content Accessibility Guidelines and was created by the W3C. There are three different levels of compliance. A - which is best effort, AA - which shows compliance, and AAA which is gold star, this is creating a new standard or new kind of level of compliance that other companies and other groups would be good to follow as well. I will talk a little bit about what we're doing today in relation to WCAG and our various levels of compliance as well as what we're looking for in the future with that and our partners along that journey. As of today, we have a fully automated testing suite for our QA team. You can see in the visual, I have included an example of an output of a test from our automated QA tests. We are utilising, currently, the Axe Accessibility Engine created by DQ. It integrates open source JavaScript and other Cucumber or Ruby based frameworks, if any of you are familiar with Cucumber or Ruby, that's what we're using today for the other automated tests within our suite so it works really nicely with those. In addition to that, we're also supporting and utilising what we call a UI or User Interface component library. What this means is you can think of it almost as a toolbox. If you're an artist and you have a box full of pencils, crayons, oil paints, paintbrush, eraser, we're building something similar for our developers as well. So, when we are building new elements in our user interface or the front end of the application, if you will, our developers already have kind of the set of tools they can use to build new things. When we are building a new page that uses a table display to display new information or we're building a new drop-down menu, or a user needs to select their desired language or they want to bookmark something to save it. All of these things — what we do when we're building our component library or building a new component is ensure that it is always fully WCAG AA compliant. So that means contrast needs to be tested, if there is any sort of tab order that needs to be tested and ensured. If there is any sort of keyboard navigation specifics that needs to be tested and ensured. That way we know when we are building something new, it will already be compliant and it helps speed up our build time as well which I'm sure everyone likes; I like that as well. Great. We're also working towards an accessibility remediation and partnership with Level Access. For those who are not familiar with Level Access, we took some time to really find a partner we wanted to work with that would really go through our platform with a fine toothcomb. We are an older platform in terms of how long we've been on the market, which is exciting, but it means that we need our partners to be very thorough. We decided on Level Access for several reasons. But the number one reason, I would say, is just truly their dedication to accessibility and their history of working with many different companies across many different industries all in software and a lot in hardware as well. It was founded in 1997 by Tim Springer and a few of his friends who were all engineers. He actually worked with a bunch of engineers that were both in a wheelchair and he built an app that would basically help them find places they would go where they wouldn't be frustrated if there wasn’t a ramp available to them or doors they could use. So, he became really passionate about it and that's why he founded Level Access. They support our remediation and have audited over 1,000 companies to date. All of their testing remediation is performed by employees with disabilities specifically and all of their suggestions are formed by those as well. The leaders include Tim, who I’ve already spoken about, and Jonathan Avila, who is the Chief Accessibility Officer. For those of you not familiar with him, he has worked closely with WCAG and has helped actually form a lot of the standards as they are today. We are excited to be working with them and, obviously, they are leading the space in a lot of this work. As for the areas of remediation that they’ll be looking at, for those familiar with the WCAG this will be a no brainer, but I always like to go through them, at least they are helpful for me. The four areas being — you need to ensure that your platform, your tools or your content is perceivable, which means that the information and the user interface components or UI components must be presentable to users in ways that they can perceive. Now that they can perceive them, those elements must also be operable. The UI components and navigation must be able to be operated by the user. The information must be understandable. The information on the operation of the UI itself must be easily understandable. For example, this would be if you are doing a tab order that would be illogical or go backwards or just generally not function as expected, that's a way of breaking that third tenet of understandability. The fourth being that it must be robust. So, the content or platform must be robust enough that it can be interpreted by a wide range of user agents, of course including, assistive technologies. So, within this remediation, we have started our global audit with Level Access. This includes all of our different applications, including universal capture which is a desktop application, our student instructor and admin roles and work flows accordingly within the platform, as well as our mobile application. Once that's complete, we will begin our full remediation and we will start in areas that affect the most users. So, what is helpful working with Level Access is they are able to guide us towards areas where they feel that the issues at hand are the most dramatic or catastrophic and then they give us a ‘back of the napkin’ estimation of what the level of effort would be to resolve that, which is great because then we can see where we will make the most progress and addressing a lot of issues very quickly and start to knock those off. So, we're really excited to see the results of their audit and start to do that work. Also, before I move on, you can see this is one of our drop-down menus and this is part of the work we have done for the UI component library. So, you can see all of these are in a friendly tab order and all of the icons have related text in them as well, which is great. So, as I spoke about earlier, the standards around accessibility are evolving, especially in a legal sense. For those of you that work with schools, in the UK or are in the UK, you are probably familiar with the Public Sector Body’s Websites and Mobile Applications Accessibility Regulations that came out late last year, I believe. This ensures a deadline of full WCAG 2.1AA compliance by September 23rd 2020, I believe, so long as your website existed before September 23rd 2018. I may be wrong with those dates, but that's to the best of my knowledge. If your website did not exist before that date, then you actually must be compliant by September 23rd 2019 of this year. So, what all of that means is we will obviously be working hand-in-hand with our customers, with our partners and within ourselves as a company to ensure that compliance fully. So, what's at stake? A lot of this is US focused, but a lot of the lawsuits we’ve seen, examples we’ve seen are US focused so I wanted to bring up some of these. In every single legal action that’s been taken so far, the litigant has prevailed which is probably not surprising when you’re looking at a lot of these cases. But over 240 federal ADA website compliance lawsuits were filed in 2016 alone. We unfortunately don’t have newer data, but we should have some from 2017 shortly. The awards can vary based on size of the case, but the legal fees can go from 25K upwards. In the early 2000s, the CSU system pulled all content out of the iTunes library program, just as an example. This is great in a way that, obviously, while it was painful for those users that had to file the lawsuit in the first place, this forced Apple to respond by fixing accessibility issues for Mac and Windows and started an accessibility-first initiative within Apple itself that has really led the industry. This is just to say a lot of, potentially, customers or users are rightly so, a little bit stressed out about this. But much like GDPR, I think this is a welcome regulation. I think this will finally push accessibility to the forefront and make sure everyone is educated and aware of the requirements and the necessity. So, what tools can you use to help make your content accessible? I start with the strengths of Lecture Capture and this is a great view from one of our partner universities. There are a couple of quotes and I will read through them here in a moment. This is just to say that when you're talking about accessibility, you're not necessarily just talking about closed captioning, you're not necessarily just talking about keyboard navigation or just talking about different assistive tools; really, its aiding access to content and access to learning in any way you can. And Lecture Capture, in and of itself, is a great way to provide that access. One student had said when they pulled the class, how has Lecture Capture helped you, is this a tool you would like to continue using? One student said, “I have dyslexia and chronic fatigue and, if it wasn’t for Lecture Capture, I would have to drop out of university”. A second student said, “I suffer from autoimmune inflammatory arthritis and had a serious flare and missed some lectures. In the past, I have suffered from anxiety over missed lectures or forced myself to walk to my lectures, making my condition worse. Having Lecture Capture meant that I could stay at home and recover properly without missing out on information and it's been a major relief”. The last student on the slide said, “As a student with learning difficulties, I found the Lecture Capture videos more useful than simply using a dictaphone because they had the visual aspect as well, and it's good revision material especially for when the instructor's head is masking the words, especially for different learners”. So, again, this is just to say the Lecture Capture, in and of itself, is an incredibly useful tool but of course there is even more we can do with Lecture Capture as well. And that brings us to a discussion of transcription and closed captioning and the differences and what that means. So, transcription, in and of itself, is also a significant improvement in the accessibility of video. Not all accessibility is about sensory impairment, which is important to think about. It provides learners other modes of viewing content which can be helpful for multimodal learners. And we are aware, and you just want to make sure everyone is aware, when we talk to them of the differences between transcription and closed captioning and the requirements of both and how they are different. I have here, transcripts do not equal closed captioning. Whereas, closed captioning, of course, is still the primary focus of video accessibility and within at least the United States and most other countries, the requirement is that it needs to be 99 percent accurate and include key descriptions such as speakers, inaudible noises or other noises. For example, if I were to ding my cup, that ding should be included in the caption as well. Compliant in-house captioning initiative needs to have accountability. If you are working with a new university and you don't have the funding or aren't working with a third party vendor that is generating these with a human, there needs to be accountability of who is checking to make sure the captioning is at an appropriate level of accuracy. Unfortunately, we're not there yet with the robot revolution of being able to fully automate, you know generating, closed captioning that is 100 percent accurate, but we're shockingly getting pretty close which is exciting. But just being said, there needs to be someone or a group of persons ideally that are accountable for that. So, we work with a bunch of closed captioning partners. We work with 3Play media, CaptionSync by Automatic Sync Technologies, or AST, AI media and Cielo24. We're also looking at partnering with other caption partners such as Rev or Verbit but I always love hearing about new companies or new solutions. So, if any of you out there have heard of any that I didn't mention or that you don't see, absolutely please put them in the Q&A. Yes, so again going back to the idea of a transcript versus caption. I'm going to show a demo in a brief moment of our live transcript player within the classroom. Again, this is just to say in thinking through our implementation, we explicitly kept closed captioning and transcripts within different views and access through different tools. Again, this is just to hammer home the fact that a transcript may not be 99 per cent accurate and it should not be considered to be the same as a closed captioning track which is why we keep them entirely separate and we don't automate any pushing between the transcript and caption track. Again, we need to have that person that is responsible to ensure that captions are appropriate and accurate. The transcript, of course, can be used for different purposes, be it reviewing notes before class, going through and ensuring you understand the material, or even ideally understanding the material faster or more easily if you are a multimodal learner. A little bit about our partnership with Amazon Transcribe before I go into the demo. So, when we were looking at the different possible partners that we could work with, we were testing with several other partner platforms including Google, Watson through IBM and 3Play media. In our testing, and in addition to just the ease of use through Amazon Stack, since we are working on AWS, we just found consistently more that Amazon was more accurate over time. We also really felt supported through our partnership with Amazon. I actually meet with our Amazon partners once a month to help them steer new features and the prioritisation of the road map or one of their leading partners in the education space. They obviously work with a bunch of other companies that are also doing transcripts but in different areas. It's exciting to show them specific examples of transcripts in educational workspaces and through different work flows and through different examples. It’s also fun as a product manager to be able to steer someone else's road map so I understand enough. We also support appropriate language packs for our four regions. We have four different regions where we host in Amazon. That's Australia, the US, UK and Canada. There are also growing support and testing for multiple languages. We're working with Amazon to help them roll out a way to automatically detect what language is being spoken and then transcribe in that language accordingly. Around levels of accuracy of the transcripts themselves, we don't really agree or advertise a specific level just because there are so many different variables that can go into the generation of a transcript. Your audio, the quality of the audio itself, where the microphone is or multiple microphones within the room, whether they are attached to the person and you get a fuzz when their hair or hand goes over the microphone or whether you have the most fabulous robust classroom set-up with multiple microphones in the ceiling and step pads that help switch the microphone as the person moves through the classroom; that can all obviously affect the quality of the transcript. Of course, accents or whether a person speaks too fast like I do in the morning when I have had too much coffee, or if they don't enunciate as much as they could later on in the day like when you are tired or … whether I'm enunciating clearly now, but really all that can affect the outcome of the transcript as well. And, of course, specialised language. Amazon is trying to constantly improve and we're looking at other tools that we can use such as custom dictionaries to improve individual transcript outputs, especially in specialised areas such as medicine. But it can sometimes confuse different terms for more standard terms, if you will. One of our professors that helps lead a lot of our research, Professor Perry Samson, he teaches weather related science. One of my favourite typos is whenever he was saying ‘gradient forces’ and the transcriber was convinced it was ‘Grady and forces’. I always imagined a person named Grady hanging out with him. Anyway, I will show you a live demo in the classroom and it's a raw transcript so you can see what I'm talking about. All right, I’m going to change my share and add computer sound, so you should be able to see everything

[pause]

Excellent. So, we're within the Echo360 classroom right now. I will walk through the different tools and what is going to happen with the transcript player and then I’ll play back just for a little bit so you can hear and see the live playback as it happens. Within the classroom, we have multiple players. So, you can see, in this case, the professor has recorded their presentation, as well as them talking. We also have our transcript window. This is available through the transcript tool which, as you'll see, is completely separate, explicitly from the closed captioning tool. Again, we keep those separate and we do that very much on purpose. Here, you can also see the user's ability to download the transcript. From here, they can download the transcript and it shows the time stamps as well as with — what I find really interesting is the confidence level of each word as it was generated by the transcript algorithm. So, what this means is that as the transcriber is going through and generating the transcript, it can be more or less confident of each word. It's given to us as a float which we can convert to an integer of any number between 1 and 100. Generally, we see that accuracy to be very high for a majority of words. Every now and again, you will see a word or a specialised word that may be very low and we will be looking to expose that in our in-app editor that I will show you a little bit more about shortly on. So let me go ahead, I’ll make sure the sound is on and play this back so you can all see this playback live.

PLAYBACK: …it later. An example of an inclusion in the cell would be carbon that collects in your lungs from pollution in the air or from smoking cigarettes or other things that can be smoked. Cytosol is simply another word for cytoplasm. It is everything that you see here in pink and you’ll notice that we’re using the colour combinations that is typical for histology the basophilic blue and the eosinophilic or cytophilic pink. So, the cell membrane itself surrounds every cell obviously…

CASSIDY: Great, so, you can see, as I'm watching along with the presentation it's going through live and following along so I can just sort of see where we are at every moment. What I can also do is it will respect variable speed playback. So, if like every other busy medical student I need to get on with my day, I can put it on 2x and it will go through two times as fast so I can get through all my different lectures and get on with my day. What I can also do is navigate to any moment within the transcript. Much like our notes feature, it will bring me right to that moment in the video. Let's say I want to learn about the integral proteins and the transmembrane, what I can do is playback right from that moment and it will continue on as it did before. Let me go back to the presentation… So, what we're excited to do is to add on to this. What we support today in the transcribe process is editing these files offline. You can see, this is just an example of - I'm editing this file in a text editor called Adam that’s developed through GitLab, the company that also makes GitHub. You can also use Microsoft Word, Notepad++, Text Editor, really anything that you are most comfortable with and the format will be the same. The output is a web .vtt file which, if you are familiar with YouTube closed captioning, it is a similar format. Here, you can see each of the different cues, the time stamp of the cue and you can go through and edit that as you would like. We will be building off of that shortly and supporting an in-app editor within Echo360 as well. We're very excited to get this going. I'm meeting with our development team this week to kick it off so I'm incredibly excited. But, as you can see, we have video play back from within Echo still, but with the active transcript much larger and the user being able to edit on the fly. So, what we're looking at for the initial launch is, of course, allowing these users to edit it within the application without having to download those transcripts. Low-confidence words like I was speaking about earlier will automatically be flagged. So, you won't really have to worry about sort of figuring out word by word what is confident, what isn't. You will actually have a slider where it will set by default what we see based on the average confidence scores of each word within each transcript. From there, as a user, you will be able to drag that confidence slider up or down depending on the needs of your users and your audience in order to edit that transcript. From this, users will be able to push transcripts to the caption track. This will not be automated. Again, on purpose, to make sure that things are compliant and that things are approved before they're pushed. And access to the editor is controlled through very certain roles. We are creating a teaching assistant role within Echo360 that will give users the ability to then access the editor as well as instructors and administrators as well and we will be looking at broadening and making that capability more specific as well as we roll out the functionality. For future functionality that we're looking to add, we will be looking at displaying a total confidence score per transcript itself, not just word-by-word. We will have some auto maths happening that we can bubble up and show users. We're hoping this will be a really easy way for people to be able to sort potentially by lowest confidence or highest confidence so they can then assign those for different users for editing based on their need again and based on that urgency. We're also looking to bubble up commonly used keywords, this would be a great way for users to search and see, “okay, I know on the next exam we're covering mitochondria, let me do a quick search and we can surface all of the transcripts where we know the common keywords include mitochondria”. And, of course, commenting, so, the ability for users to really engage with the transcript in a deeper way and ensure both their edits are correct but also that they can then go in and share thoughts or ideas on certain areas of the lecture itself. Great. So, we're really excited to start working on that functionality. We would love to hear any thoughts, ideas, questions, concerns you have. But more generally, you know, I would just love to hear how else can we help and what else should we be thinking about or looking at. We're looking at, you know, creating a lot more cohorts and webinars just to get more feedback and ideas from the public. Any other tools you would recommend would be amazing as well. But also, generally, we would also just love to hear kind of what standards or work flows your university has already implemented and what you think will need to be implemented or changed potentially in the future. What sort of gaps do you foresee that you aren't sure yet how to solve or how you're not sure your university will be able to solve. And what standards or best practices that you are currently driving you think others could learn from. This is where I love to dive into the Q&A and see what people are doing. I will leave this up just as a talking point. Let me share again…

DARLENE: That would be great if you could Cassidy. They were great questions. If anybody has got questions for Cassidy, please write it into the chat pod or the question and answer pod. We have just got one question at the moment, Cassidy. Does Echo ASR learn as it goes, as the same as the Amazon builds its recognition if a transcript is corrected, edited by users?

CASSIDY: As of now, if it is edited, the system isn’t learning from it unfortunately, but as we're building out the editor, our plan is to have that communication be more two-way and have that learning be more automated.

DARLENE: Brilliant. Is the transcript example now available for Australian universities using Echo360?

CASSIDY: It is, yes. So, the live demo I just did is currently available in production for all of our customers.

DARLENE: And are you aware of how much Echo ASR or Amazon is used in Australia at present as the technology of ASR needs to build recognition of Australian voices?

CASSIDY: Yes, so, I would say I don't have specific numbers or percentages of our user base. I do know that it is being picked up a little bit more widely in the Australia region than our US partners. Our US partners tend to be a little bit more risk-averse or unwilling to try out new and exciting things. Yes, but we do have a good amount of our customers picking it up.

DARLENE: That's great. That's all the questions at the moment. Is anybody online currently using? I know a couple of universities have been trialing it. I’m here at the University of Tasmania, we have had a few. Does anybody want to make any comments in the question box that I could share with anybody? Nothing’s coming through at the moment. Is there anything else that you are wanting to say, Cassidy, if we're waiting on other questions?

CASSIDY: No, I think this is really exciting to me. So, thank you for having me and letting me speak about all of this. We're really excited to be working on additional functionality around this, specifically, a transcript editor. But even outside of this presentation, if anyone has any thoughts or ideas, hopefully they can reach out to you or Jo or myself, I will share my email at the end of this so people can reach out to me directly. I love to always hear new ideas, work flows, anything like that.

DARLENE: We just had a question around cost. That might be more a question that Jo may be able to offer later. A couple of universities are utilising the free hours and they are worried about that long-term cost.

CASSIDY: Of course. That's definitely something Jo can help answer and she can also walk you through what your potential work flows are and what your expected cost would be, based on usage.

DARLENE: Just asking what the ETA for the app editor would be?

CASSIDY: Yes, so it's about to be in development. We can't, you know - we don't usually guarantee a specific date, just because of our development process, so we practice agile. We develop and release software in two-week sprints, which helps us be lean and release bug fixes faster, but also get substantial and useful software out into production into our customers' hands faster as well. So, I can say that it is about to be currently actively coded against. We're expecting to have it be released within the late fall in the States. So, late springtime frame in the APAC region. But that's our best estimate right now.

DARLENE: We have had a comment that people are loving the fact that the transcript can be seen as a separate function to the captions. That is really useful and well done for doing that.

CASSIDY: Great.

DARLENE: How automated is the captioning process?

CASSIDY: We hook into all of our captioning partners’ APIs. All you have to do is basically hook into our system with your secret and ID for their account. And then, everything just gets pushed to them automatically and displays in the classroom automatically. We can help you reach out and set up a relationship and partnership with any of the closed captioning providers you would like. But once that's all done, you basically just set up your account in Echo and all of it gets displayed and processed automatically.

DARLENE: Someone said, thanks for the new version of HLS for Live. Having the platform more accessible off-campus is great.

CASSIDY: Great. I will pass it that along to Tony, he’s the Capture PM, he’d love to hear that.

DARLENE: Excellent. We have put Jo's contact details in, if people want to email her as the Australian rep, into the chat box. So, people can grab her email from there. Another question, does that mean there's a real person doing the captions?

CASSIDY: Yes, so we don't do the closed captioning ourselves. We rely on our closed captioning partners. They’re experts and this is entirely their business. There are different levels of closed captioning you can buy from any of those third party partners, and one of them is always human-generated captioning.

DARLENE: Brilliant. Well thank you. The questions have stopped coming in. That's fantastic. Thank you so much for staying awake or for getting away from your TV viewing or whatever.

CASSIDY: No worries. It's been wonderful, thank you.

DARLENE: You’ve made us a little bit jealous. We don't have a strong litigation, which is probably good that we don’t have a strong litigation here in Australia. But to see how many cases have gone up in America that has actually brought about significant change in this area is great. We don't have that same experience, but we're benefiting from it, hence, Netflix is all captioned now because of what has happened in the U.S. But we haven't had as much of that happening in the university and training sector. There was just one other question, you mentioned having an inhouse captioning team. What is their main purpose? That was more someone else's in-house, wasn’t it, was it?

CASSIDY: It must be. We don't do in-house closed captioning. We only work with our third party partners. That's entirely their expertise, yes.

DARLENE: Yep, excellent. All right we will finish there. So thank you everybody, for joining us. I think the offer is certainly there to email any of us with any of your other questions and we will pass it on to Cassidy or Jo. It's been great to hear about how it works and for the university that I work with, they've been really enjoying the trial. So, it's fantastic. For the next webinar that ADCET is hosting, we hope to have one with NDIS, but we're having trouble getting a date. So, hopefully, in August we will have something around National Disability Insurance Scheme and the interface between the further education sector. So, if you are not on our mailing list, please go to our website and register to receive our newsletter where you’ll get to hear all about our up and coming webinars. Thank you, everybody. Thank you so much, Cassidy, and thank you, Jo, for doing a great job in the backend answering questions as well. Brilliant. Alright, thank you everybody and have a great day.