

ASSOCIATION OF MIDWEST MUSEUMS

TECHNICAL WORKSHOP 3

EMERGING TECHNOLOGY IN VIDEO PRODUCTION

October 28, 2021

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>> Good afternoon or good morning wherever you are. Welcome to the third technical workshop: Emerging Technology in Video Production, the last of the webinars in the Video Production Tools module brought to you by the Digital Empowerment for Small Museums Project, a nationwide initiative organized by the six US regional museum associations and dedicated to providing free, self-paced training resources for small museums. This inaugural series of online trainings focuses on digital media and technology topics and is made possible by funding from the Institute of Museum and Library Services.

My name is Avery Shaughnessy Comfort. My pronouns are she/her and I'm your host for today's program. My visual description is as follows: I'm a white female with short brown wavy hair wearing red, square-shaped glasses and a purple quarter sleeve top. I'm located in my home office and behind me are two windows, an off-white wall, and a bookcase housing various knick-knacks.

In this era of virtual meetings when digital spaces may substitute for our physical sense of place, it's important to reflect on the land we each occupy and honor the Indigenous people who have called it home. I'm speaking to you today from my home office in Erie, Pennsylvania, the historical homelands of the Erie and Seneca peoples.

Wherever each of us are located, let us acknowledge all Indigenous nations as living communities, their elders both past and present as well as future generations. We, the Digital Empowerment for Small Museums Project recognize that our organizations and those of our members were founded within a colonizing society which perpetuate the exclusions and erasures of many Native People throughout the United States into beyond. We ask you to reflect on the place where you reside and work and to respect the diversity of cultures and experiences that form the richness of our world and our profession.

And now for a few housekeeping notes before we introduce today's presenter and dig into the content. I would like to acknowledge today's American Sign Language or ASL interpreter who is

located to the left hand of the screen and let you know that captioning for today's program is embedded in a box just below the YouTube player on our website with controls to adjust your experience.

The best way to continuously refine our craft is to listen to our attendees so we ask that you share your candid feedback with us. Following today's program, you'll be sent a link to a satisfaction survey. Sharing your experience through the survey will only take a few minutes and will greatly improve our work.

During today's program we will address as many of your questions as time allows however sometimes we are unable to answer all of the questions that can arise after reflecting on a program. So, we have set up an online community forum for raising questions, posting answers and connecting with your fellow museum practitioners located on our website. If you're looking for help between programs please visit that forum on our website, create a login and post your questions. A member of the community or one of our Student Technology Fellows will get back to you. Lastly, please be sure to follow us on social media and stay aware of future programs. Links for those will be posted in the chat area.

And now it is my pleasure to introduce today's presenter. We have Michael Owen, principal at MediaCombo located in Brooklyn, New York. Michael Owen is cofounder of MediaCombo, a digital media studio with his partner Robin White Owen. He has developed AR and VR experiences for the Morgan Library Museum, the Carnegie Museum of Natural History, and the Pollock Krasner House and Study Center. In 2016 he went to Lake Baikal in Siberia to create three Google Expeditions. He also produced an impressionistic VR film about the lake and has used the project to demonstrate a finalist concept for the 2020 XR for Good Alcove competition. He has also produced documentaries, music videos, TV commercials, exhibition programs and video art over 30 years. Today Michael will talk about new and emerging video formats, tools and platforms such as 360, volumetric video and virtual tour services. He will include examples of recent video working museums with small production teams and discuss considerations and planning for the future scalability and sustainability of a museum's video production tools. Let's please give Michael a big welcome and let's get ready to begin. Michael, feel free to take it away whenever you are ready.

>>MICHAEL OWEN: Hello. Let me find, thank you for that introduction. It is a pleasure to be here today. I'm Michael Owen, a white male in my 60s with graying brown hair wearing black eyeglasses and a black and white patterned shirt with a neutral background behind me. I'm joining you via videoconference from Brooklyn, New York, the ancestral land of the Leni-Lenape people.

Why am I here? I want to speak with you about the ways museum professionals can use video and other new technologies to make museum content available to broader audiences. My partner at MediaCombo and I have been producing interpretive content for museums for over 30 years. Initially it was just linear video introductions to exhibitions or contextual information about specific objects. As technology evolved over the years, our clients' requirements and our

capabilities evolved to include interactive kiosks, websites, video walls and in the past six years, immersive media applications including virtual tours and experiences.

Why should museums care about virtual tours? Museums are trusted spaces and can play an important role in their communities not just as repositories of history, culture, information and learning. But also as a safe place where people can socialize and exchange ideas around common interests. The events of the past year and a half have demonstrated how fragile the fabric of our society is. How many communities are underserved and don't have access to museums? But also, how has the technology that facilitates distance learning and collaboration evolved and has been broadly accepted by the public?

We are at an inflection point for museums and think beyond their walls to increase their audience and their geographical reach beyond their immediate communities. Most exhibitions are the result of hundreds if not thousands of hours of labor and often extremely large sums of money. They are up for a few months and then they are gone.

We have the technology to preserve them.

The four examples that I'm going to show today are of existing technologies that can be utilized to preserve -- [pause].

Sorry about that, for some reason I'm not advancing the slides. Let me get back to what I was saying; the four examples I'm going to demonstrate today are existing technologies that can be utilized to extend museum reach and the last two are tools that can be used to virtually preserve exhibitions and objects either as historical record or the way to make them available in new ways without geographical restrictions. The first piece I want to show is.

>> Michael just re-share it again and we will put it back up there, again if that's okay.

>>MICHAEL OWEN: The first thing I want to show today is a Silent Video Tour that utilizes Instagram Live to give visitors virtually a tour of, in this case The Broad Museum. Heidi Quicksilver, Director of Technology at The Broad in Los Angeles developed an extremely simple but elegant tour solution for giving public access to galleries when museums in LA were shut down due to the pandemic. A digital team member pushes a camera, in this case an iPhone on a wheeled tripod with a stabilized head. The tours are streamed on Instagram Live and last 10-20 minutes. The Jeff Koons Tour you will see a brief clip of is 10 minutes long with five featured artworks and the audience numbers are usually 100-150 viewers for the entire tour. They have had peaks a 500-800 people depending on the content and the Jean-Michel Basquiat Galleries were the biggest numbers.

Here we will play a clip from the Jeff Koons exhibition. It is so minimal, but it is sort of really quite elegant and mesmerizing and a nice way to show off your collection.

[VIDEO PLAYING]

>>MICHAEL OWEN: The tour basically takes you through several objects and they highlight five specific works of art with captions. And the caption artwork is loaded onto the phone and so when it's streaming using the Instagram Live controls they are able to switch between the live video and the captions at the appropriate point in time.

Anyway, the next thing I would like to show are the Google Street View tours. Anyone can submit photograph and 360-street view panoramas to Google Maps. Once they are accepted, the destination becomes searchable in Google and the results linked to the tour in maps. This is mostly used for retail destinations, but it is an innovative and relatively inexpensive way to make your physical space known to someone unfamiliar with your institution either locally or anywhere in the world depending on how you load in the search criteria. And you can do this yourself and there are many companies and individuals that offer this service but the two examples we are showing today are by Kaden Media based in Toronto that has a network of photographers around the country and I believe in some other countries as well and they produced the two examples I'm about to show you. This is where I would like Nancy to take over for the first street view. I need to stop sharing?

>> Nope, keep sharing. We've got it on screen.

This is a gallery I believe in Toronto and basically, it just gives you an idea of how you can capture the space, look at the art, what is in there and get a sense of what the destination is like. A simple tour like this can be done for about \$500 including all of the bureaucracy of posting it into the Google Maps system. You can go further and add hotspots and other things like that. Obviously, the cost increases. We will have links to sample pricing; I think that's all we need to show this space let's move on to the next.

Here is the Peale Center in Baltimore. Again, I think a very nice job was done to show how this space works and give you a sense of what this particular installation was like.

It is also a record of what this exhibit was like. Now, the one thing I will say is, and this is I think a really great way to show off a particular exhibition and extends throughout the entire house. But Street View, the one thing I will say is you are putting your work in the hands of Google. Google has dropped initiatives in the past. I think it's totally when you're talking about spending less than \$1000, worth doing something like this. But you have lost control of it because it is hosted on the Google service and so the next thing we will talk about is 3D Vista which is a more comprehensive system.

We are in a gallery here and if you click on that painting, this is a hotspot. And audio will start which we don't necessarily need to hear but there is a description going on in this particular thing. If we click out of that painting, the camera will continue to rotate. I don't particularly like this camera rotation business but whoever designed this tour liked it and then we click on one of these spaces and you can maneuver your way into the gallery.

And again, you can walk around. You can get a sense of what it is like to be here. So let's pause a moment and I'm going to catch up with 3D Vista. I'm going to stop sharing if you can reconnect me again with the. What I wanted to say first about 3D Vista is and this carries on from what I said about the street view. Street view you basically either commission someone to take photographs or you submit your own photographs and you give them to Google. You have kind of lost control of whatever it is you have put there. Because you are not hosting it. You really if you created all the work yourself maybe you can repurpose it later. But the main company in the field of virtual tours is called Matter Port and is a fabulous system technologically. You can get their camera or use other 360-cameras and they will stitch these tours together to make these nice 360° images. You can put hotspots in like you just saw in that 3D Vista example but the main thing I have to stress with you is you don't have access to the files that were used to create that tour.

Why I like 3DVista is that you are buying the software or you are commissioning someone who is familiar with the software and you retain all of the elements that make it work. And I find of the various software that does this, most of it is cloud-based but this is one where you actually pay for an application on your computer and you build or the person you hire builds the tour and you have something that you own and can repurpose at a different time. I've shown you the first gallery. The second example that Nancy can show now is the Science Museum. Now here, you can see all of the content of the Science Museum is basically if you can go to the example of where you are starting out. We can go here and now let's go to the, go back to the fish, pescas and mariscos. This is a Spanish product and the example given you is a Spanish Science Museum but if we look at the menu on the left the map we will select, the third one over on the top there I believe. Yes. Now you're in a specific exhibit. If you click on the walls, you can bring out any of the exhibit media. Close that. You keep turning there will be another one you can see the fish there.

There is another one, if you scan more and you will see there is a video embedded into the thing which can be called up. And basically, you can port all of the informational content of a tour into a virtual media product that can be seen by anyone anywhere. And one other thing if we can quit out of this and go to the next example, is a, let's quit this to the next. This one. Here we go. This is a commercial-use case but what I like about it is you can embed people talking in a virtual space, so you can put a docent or curator-type or subject expert into a scene so if you click on this guy here. You can see, he should start talking. About the patio. Yeah. We don't have audio here, but this man is talking. This man is in the space. If Nancy turns the camera around, he stays in position he is not an overlay. He is embedded into the 3D environment at I think there's a lot of possibilities that people can have for this kind of annotation by a human that you can relate to in a space.

I think the possibilities for these kind of tours is really endless in terms of imagining and in this particular case if you've put a lot of effort in creating an exhibition, this is a way you can preserve it for other people to use after the show is closed.

The next and final chapter of what I want to talk about is: the 3D objects. And I guess if we can drive, and I'm having problems switching back and forth between my copy of the PowerPoint.

3D objects. And I think this is the future of how a lot of people will understand and interact with museum content and imagery. And we are just really beginning to think of all of the possible use cases for 3D objects and how they can be put into, either in a museum setting as a way to allow visitors to examine something that they physically could not hold because it would destroy the object. You can have the real object and then the 3D model next to it or you can think about ways of showing things that are otherwise contextualized in a virtual space and you can just do things that is, I say here are not possible in real life so I want to show four different types of objects that were scanned by a company that is an expert in the field and they are called Direct Dimensions and they provided four examples and if we can start with the straw hat. See why certain things might cost more and what you are talking about in terms of digitizing a collection and turning them into 3D objects.

If Nancy could show the hat that would be great. So now the next one, this is about \$500 worth of work because just one type of scanning was needed to store the hat, to record the hat. The next object is a sewing machine and I just love looking at this thing and the way that you can zoom in to different aspects of it. And this is something that would cost between \$500 and \$1,000 to scan. In particular, I would like if you can zoom in to the sewing needle meets the fabric.

Let's look at, there is a jacket. Materials like jacket pose more of a challenge from a recording standpoint. So you have, in looking at an object likely jacket you are talking about capturing the shape, the actual volume of the thing. But then you have more subtle textures that have to be recorded to make it an actual, more accurate rendition of the object that is being scanned so something like this might cost between \$1000 and \$2500 to record.

Finally, the fourth example is the guitar that was José Feliciano's guitar. What you are looking at here is requiring several different types of scanning. Because what you have is the reflection and we are managing to capture the reflection of the surface while still preserving the accuracy of the recording. And certain things in this case like the guitar strings were replaced with CAD, the computer-generated images of the guitar strings. But to me something like this as an object is really exciting because I could imagine putting it into a virtual setting where the user by clicking on the strings would hear the sound of the guitar. You could hear that sound. And you could really make it an interesting experience.

So, that is the fourth example and I think if you think about using objects like this in ways that you can think of to create virtual exhibitions whether they are grounded in an actual virtual space or just shown as individual things within the context of let's say a website. There is a lot of possibility here. And so that is what I have for now.

And I will be happy to entertain any questions.

>> All right well thank you Michael and we have quite a bit of time for questions so if you have any that you are thinking of as we go through this process feel free to place them in the chat area and one of our Student Technology Fellows or Museum Learning Hub Leadership team will get those over to us. A reminder to put those in the chat for us. Starting off, Michael, it's interesting and I think some themes in your presentation suggests that elegant and simple really is the way to go with many of these things. And with the face of COVID, museums are really moving to have hosting these things in a digital space, not just for visitation purposes but maybe for other purposes. They want to have that on there for donors, for other content so with that in mind, some of our questions are concerning cost versus benefit when upgrading to some higher-level equipment. Can you talk about how you determine when it is best to find a professional? What can you do on your own time and what types of equipment typically do you use for these types of projects, whether they be Google Street View or 3D Vista or something else?

>>MICHAEL OWEN: I think the cost-benefit really has to do with what is your in-house capability in terms of people. At the simple level, what The Broad does that's just an iPhone on a tripod. That is as minimal as you can get. Not everyone has the eye candy as it were, to push a thing through but the idea that they did: making it short and just annotating certain objects within the gallery made it an interesting experience. They are not even allowed to record those shows because they don't have the rights to turn them into a video program so that's why it has to be done as a live show. We got it because this is just a closed group of people, so I was able to show it in that context.

I would say when you get into 3D Vista, it's not a very expensive program if you're talking professionally, it's 500 Euros. But you do need someone who is either familiar with After Effects. I'm just throwing out programs of similar complexity. You would have to have someone who is confident in their computer skills and I think they could pick up something like this. With 3D Vista people can use regular 35mm cameras and create a circle and then it gets stitched together or they can use 360 cameras such as the Insta 360 makes a series of cameras and I can put them in the list of resources related to this particular broadcast for people to look at. And record them themselves but for a lot of people you just want to turn it over to a professional who knows how to do it and concentrate on getting the result you want.

I think what was said by Direct Dimensions when I was talking to them about the 3D objects, and it really applies to any kind of digital media. It's about the level of effort required to do what you want to do. So you want to start off, we're going to see the room to start off. Okay we see the room we see the objects in the room. Do we want to see every single work from a perfect perspective? Do we want to have that capability? Now you are adding stops, so you cannot just have a scene of the room, you have that frustration: I see that work of art over there but because it is digital and you only got so many hotspots that you can visit you can't get a really nice view, a direct view of that object be it a sculpture, artifact or painting.

So now you are adding, is that the cat? [LAUGHING].



That adds more stops that adds more time that adds more effort. Do you want to annotate each thing? Do you want to have equivalent labels to pop up for each thing? All of these are layers which are nice but in and of themselves they are not difficult, but if you scale that over a couple of rooms, now what was a very simple project is now has now become instead of two or three days, a week or eight days and therefore the cost goes up whether internal billing or hiring someone from the outside.

To me that's the choices want to make not just about the equipment you use to make it. I think if you define what you are trying to say or do or what is important to communicate, then you figure out what you need to do to achieve that and you can back into this is going to require this amount of people to know how to do these kinds of activities. We need people who will write the copy for the notes, people who will know how to play. It just it's about defining what you want to try and do is what dictates everything else. I hope that is a helpful answer.

>> I think so and with that in mind that leads into a little bit of our next question which is based around the planning process. This is specifically relating to virtual reality and augmented reality experiences. And as you think about these things whether you're doing it in-house or with an outside vendor perhaps, how does that planning process differ for virtual reality and augmented reality versus more traditional media means?

>>MICHAEL OWEN: A lot of people in AR and VR come from technical backgrounds. Related to their craft. Because I come from a video background, a media background for which to me AR and VR is just another tool, I kind of think of it in very much the same way. You are applying a tool to a use case. With AR and VR they are two very different things: augmented reality is best-on-site. I think virtual reality is something that is really extending museum content off-site. I think except for maybe a few things, the idea of a museum having to support virtual reality on premises is counterproductive. You want people to come to experience your location and interact with that space. Putting them putting a visitor in a headset and taking them away I mean, it's not impossible but to me it is a lot of effort is involved in not supporting what you have there, whereas augmented reality is maybe giving people new tools to experience greater depth and meet levels of an object. You can take away the wall labels, you can have labels in multiple languages that explain what object does.

You can, depending on the sophistication of the technology you are using, show an object in the context it was in that you could not see in the gallery space so there are a lot of things there that I think are exciting and again I think VR is really, and you can think of it also in terms of sound; you can do sound design spatially located that can make a room come to life. That is very exciting.

And virtual reality I think is a way to take your content and make it reach other people in a very impressive way in a way that you can do with the, that transcends a screen experience because when you're in virtual reality you feel like you're in the place that you are experiencing that the media is about

>> So it sounds like Nancy might have a slide that would suggest a visual prop for this, could you put that on the screen? Let's see if we can get that here. I think this was in terms of your video; can you talk about some of that 360 video and what components were involved in that planning process?

>>MICHAEL OWEN: Sure. This was done for the money that I was able to get from Google was to do three Google Expeditions and as people in the audience may be familiar, Google Expeditions were widely promoted and distributed as a free resource to schools around the country. And they offered these viewers that were either the cardboard that you could put the phone in or I think Vista, the old slide, the slide viewer. They had a version of this Google Cardboard and basically you could see up to about eight 360-degree stereo views of a particular subject so they did national parks. They did the Air and Space Museum. And we were commissioned to do three about Russia. One I did for the Memorial Museum of Cosmonautics - which I really liked and thought turned out very well. And another was about the reason I really wanted to go to Russia and what's in the background of this slide which is Lake Baikal. So we did these 360 slides. They then had hotspots put in which were annotated and were a great resource for school that wanted to show students or get them involved with that subject. And the teacher had a tablet and could see where the students were looking at any one time on the 360 image.

The thing is Google abandoned the Google Expeditions last June and there are several companies that are trying to take those works and repurpose them. But a lot of schools are pissed off because they invested money in the players for using these Google Expeditions and they are no longer available. I know there's a company in England that is distributing them and I know Google Arts and Culture took the one we did of Museum of Cosmonautics and that is on their website.

Another reason not to completely fall in love with a technology company that you cannot guarantee will stay in love with whatever it is that they are selling today in five years' time. So in terms of planning, I would say when you're thinking about 360, there are two types of VR. There is the type that was done that you see this slide of that camera is capturing a 360-degree photographic image. It's a totally immersive photographic image but there is a single node that you cannot get closer or further away from anything you are seeing so the experience is immersive, but you can't interact with it.

I think that has some limitations in terms of storytelling. It is harder to tell a lot of facts. You have to slow the editing down very much because it is so immersive. People want to look around. There are a lot of types of storytelling where if you want to give a lot of information fast you are better off with traditional 2D information.

Another type of VR which is more like a videogame where you build the 3D world that you are in, which is what we did for the Pollock Krausner House and Study Center. We recreated the studio in which Jackson Pollock at first, and then after he died Lee Krausner, the same space and had been changed, painted in and in that you can actually move around in the space. You

can look at things you can move, you can put your hand through a paint cart which is where she had stored all of her paints. You build a virtual world like a videogame world, but you can move around in it.

And that to me is particularly exciting but it's also fairly expensive to try and create. And it depends on what again what it is that you are trying to tell. To give someone a sense of place, what it's like to be in a rainforest. What it's like to be in a busy street. To have that immersion of being somewhere else I think 360-video can be very powerful. But it is giving you an impression and maybe you have to use that together with more traditional media if you are trying to then convey a lot of factual or specific types of information. It's how you combine the media that is best for communicating specifically with what the objective for that communication, that message should be.

>> Let me take a look at my questions here. How do you feel about, obviously these are very visual images and tours, how do you feel about the accessibility of all of these tours? Are there ways to incorporate things like visual descriptions, alternative text of the good for deaf and blind audiences? Are there ways to make them more accessible?

>>MICHAEL OWEN: There are a lot of people working very much on that aspect of what you're talking about. Obviously, I think for, for hearing-impaired people, VR offers all kinds of ways of being able to visually, to show what is going on. I mean audio description, you can put in any kinds of titles, any kinds I mean it's actually quite an easy, well not easy. It is feasible to do all kinds of layering of information both using augmented reality and virtual reality.

There is effort required obviously to do this, but it is technically quite feasible. With AR you can use headphones. I think very soon everything will be in glasses so that that information just will be overlay. We are going to have to get used to it there are pictures obviously, 30 years ago everyone was reading a newspaper on the subway. Today same picture everyone is holding up a phone. In the future, 10 years from now, people will not be holding phones anymore because they will be getting their information probably through some kind of head-mounted interface. So, I think the idea of using augmented reality to say, provide wayfinding for visually challenged people in the forms of tones for you know where to go. That is being worked on. In terms of people who cannot hear, to be able to have visual supplements that explain what's happening as you say, descriptive texts. Again, it could be done in different languages and I'm sure that will be adopted more and its totally part of what can be done with this digital technology.

>> We look forward to seeing how that technology continues to evolve over time. Another question we have, can you comment on feedback from audiences of these 3D presentations or tours? Do people understand how to work these? Do we see that feedback? Do they really click on the hotspots all the time or are they just walking through them? So to speak.

>>MICHAEL OWEN: I would say, I've seen a lot of exhibitions where I don't know if, I find that in many tours I can't get the view of the object that I really want to see as much as I would like. That they were made by people who didn't have an appreciation for the subject matter. And so

they are not hugely successful. Just because it is a virtual tour doesn't mean it will be a successful virtual tour. I think if the purpose is, and I'm thinking of, if the purpose is to preserve what it was like. I would love to go back to the Armory Show, 2010, and see what was like to have been in that space. And of course, you can see some of the works that were shown. They are in collections; the Newark Museum has a lot of them. But you never can get a sense of what was like to have been in that place.

What I like is that you can preserve in time what an exhibition was like and some of the purposes of that might be to think about how it was curated, how the material was presented and be able to compare that in five- or 10-years' time with how does it fit with how people approach that same subject matter today?

I think, you know, if what you're trying to do is tell a story about a particular theme or subject, and you are basically careful about not making it come again, you have to break the material down, so it is short and it's compelling. And I think in that case you will have a successful show. I do think if the comment is, is a lot of this bogus and not particularly successfully implemented? Yes, I've seen a lot of examples that I don't think just because it was a 360-tour is particularly helpful in understanding what went into that show or what the artist is about.

>> Okay. We probably have time for one or two more questions before we close out today. Another one of these questions comes from most of the examples that you've shared or from locations with large, open exhibit spaces and wide camera angles so can you comment on use of 3D imaging and perhaps smaller spaces or more narrow spaces, for instance a historic home or gallery? The equipment, the making that work visually. What are your thoughts on that?

>>MICHAEL OWEN: In photographic VR, you don't really want to get closer than five feet. You just, you have issues with the way you can in 3D, zero in on something make a nice impression. To me when you talk about a smaller space and if there is the ability to scan it and make a 3D copy of it, I think those are gold mines because you can examine something in great detail without actually going to the space.

If it is if there is an accessibility issue in terms of climbing stairs to go and visit a particular room in a historic home. If there is wear-and-tear issues. Making a digital twin of that space, to me offers an amazing amount of potential. To be able to examine in great detail. So, I think there is a lot of advantages and the fact that it is small is not a technical hindrance. As I said, with photographic VR you would just, if it's a really narrow space then you would have to make such special considerations for recording it for keeping everything sharp and in focus. But digitizing it I think you would have no problem and it would be really interesting.

>> Wonderful. Some good words of wisdom and I think that is all the time we have for questions today so thank you Michael. Any final words of wisdom before we let you go for today?

>>MICHAEL OWEN: I think I've said everything I'm able to say about this subject.

>> Wonderful, thank you very much again for your presentation and for answering all of your questions. Okay. Once again, thank you everyone for attending today's program and thank you to our instructor, Michael Owen. If you enjoyed this program, please do us a favor and share with your network. Word-of-mouth is the best way that people hear about us. We really appreciate your participation. We hope to see you for future programs. So just a reminder that after each module, all four videos will be available on our website as well as a complete toolkit of resources provided by all of our presenters in the module series. Stay tuned to us and upcoming events by visiting our website: [Museum-hub.org](http://Museum-hub.org) for more information on upcoming events.

So again, some final reminders. Please be sure to visit the forum on our website to ask questions. Again, you will want to create a login and join the community forum. Follow us on social media to stay where future programs and links will be provided in the chat area for you for easy access and remember to complete the post-event satisfaction survey. Our best way to learn and refine our craft is to listen to you and listen to your feedback in these surveys. Your participation is optional, but they do provide us with a lot of information. And lastly, be sure to join us next week for the next module which will occur on Thursday, November 4 at 2 PM Eastern time or 11 AM Pacific time for the Inspiration Session for our Audiences and Analytics Module. Speakers will include Arturo Garcia, Manager of Marketing Communications at the Museum of Photographic Arts in San Diego, California. And Emily Robertson the Marketing Manager at Gore Place in Waltham, Massachusetts. Thank you very much again for joining us this afternoon or this morning and we hope to see you at a future event. Thank you take care and stay well. Thank you.

[End of program]