In the Matter of:

Developing the Digital Marketplace for Copyrighted Works

March 28, 2019 Third Public Meeting

Condensed Transcript with Word Index



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	1		3
1		1	WELCOME REMARKS
2		2	MS. ALLEN: So good morning. If we could
3		3	just start getting started and sitting down in our
4	DEPARTMENT OF COMMERCE	4	seats, I'll give a few housekeeping notes and then
5		5	introduce Shira, and then we'll begin.
6	INTERNET POLICY TASK FORCE	6	So just while you're getting seated, I'll
7		7	give an overview of the day. We'll have coffee and
8	DEVELOPING THE DIGITAL MARKETPLACE	8	tables set up in the room next door, so if you want to
9		9	have sidebar conversations or, actually, there's
10	FOR COPYRIGHTED WORKS	10	coffee here as well.
11		11	The restrooms are out to the right, and we
12	THIRD PUBLIC MEETING	12	just ask that everyone here register by signing in up
13		13	front. If you haven't already, please do so. We did
14	MINIDADAY MADAU 00 0010	14	sort of take an informal poll of people who might be
15	THURSDAY, MARCH 28, 2019	15	interested in a happy hour nearby, so that's on the
16 17		16 17	registration list. We'd like to have a headcount by noon, if we could, for the restaurant.
18	U.S. PATENT AND TRADEMARK OFFICE	18	And with that, I think I'd just like to say
19	600 DULANY STREET	19	welcome, and it's my honor to introduce Shira
20	ALEXANDRIA, VIRGINIA 22313-1450	20	Perlmutter, who will provide opening remarks. Shira
21		21	is the Chief Policy Officer and Director for
22		22	International Affairs at the United States Patent and
23		23	Trademark Office. In her role as Policy Advisor to
24		24	the Undersecretary of Commerce for Intellectual
25		25	Property, she oversees the USPTO's domestic and
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1	INDEX	1	international IP policy activities, legislative
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Government can facilitate the further development of a robust online licensing environment for copyrighted works. We've held a number of public meetings. We've had several rounds of public comments on the issue, and we described it in full in our 2013 green paper on copyright policy, creativity, and innovation in the digital economy.

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Just for those of you who haven't read it, the green paper is very useful, even today, as a very comprehensive overview of the copyright issues that are raised by digital technology. And it is still available on the USPTO website. The green paper devoted an entire chapter to ensuring an efficient online marketplace. And in the paper, we looked at then-current licensing examples and talked about some impediments that had been identified to licensing for online distribution.

And at the time, the ones we identified included the complexity of licensing in the online environment, particularly in the music space; the challenges with mapping old contracts to new uses; and issues about licensing across borders. Now, of course, there's been considerable progress since that time, but licensing challenges do still exist in today's digital world. And we've organized this

THE DIGITAL MARKETPLACE: INDUSTRY PERSPECTIVES

MS. ALLEN: So this first panel will have a series of presentations, and then it will be open for discussion, time permitting, and questions from the audience. And I see that Vickie Nauman has just arrived, so please come on up.

Our first speaker today is Janet Hicks. Janet is Vice President and Director of Licensing at the Artists Rights Society. She is on the Executive Committee of the International Council of Creators of Graphic, Plastic, and Photographic Arts, the visual arm of the International Confederation of Societies of Authors and Composers, CISAC, and she is a curator and advocate for emerging contemporary and outsider artists. Welcome.

MS. HICKS: So, hi. Thank you for having me. I'm pleased to give the visual perspective here at this meeting. I know that everyone on this panel will give perspectives from other disciplines, so I'm sort of specifically focusing on the issues that affect visual artists in this presentation.

So there's a lot of pain points that we're going to have with a lot of the other creators in this room. And I'll review some of these in the presentation. Obviously, value gap is one that is big

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meeting building on its predecessors in 2016 and 2018 to facilitate a cross-industry dialogue on ways to promote an even more robust and collaborative digital online marketplace, including to provide updates on various technologies and to highlight the new initiatives that many of you are working on.

So we'll start today's meeting with an overview of how different content industries are evolving in the digital economy and then we'll talk about developments in the identification of content, registries, and rights management, and current issues surrounding licensing and monetization.

So we're very much looking forward to a productive exchange of ideas and again are delighted to see all of you with us. Thank you.

(Applause.)

for a lot of them, but also things like framing, collective rights, fair use in the United States, and other issues.

So first I want to talk about value gap, which everyone is probably familiar with this as representatives of creative content. According to the 2018 Global Collections Report published by CISAC, the International Confederation of Societies of Authors and Composers, which ARS is governed by, global royalties for all types of creators rose to a record high of \$9.6 billion euros in 2017, which is up -it's about 11 billion US dollars -- up 6.2 percent from 2017. Royalties from digital income are reported over the 1 billion mark for the first time ever, a 24 percent increase from 2017. And digital collections have nearly tripled, up 166 percent in the last five

Despite digital's rise for all repertoires, revenues from digital uses remain far below other usage types. The CISAC report reads only 13 percent of creators' royalties come from digital sources, a reflection of the gross mismatch between the volume of creative work being made available via digital channels and the amounts returned to creators, clear reference to this value gap.

2 (Pages 5 to 8)

So much online material is not cleared, and what is our recourse for visual artists is we have, of course, the DMCA takedown notice. Visual artists do this actually for Artists Rights Society. This is a service we provide for our member artists. Unfortunately, of course, it provides no loss -- no compensation for that loss of revenue, no compensation in general. It usually results in just the image being taken down. And as some of you probably already know, it usually means that this image will pop up again elsewhere.

Other highlights from the CISAC report include these provoking numbers that show the growth in licensed visual material is on the rise, and we can only imagine how this is reflected in the unauthorized uses that we don't know about.

To this point, I will turn to an issue specifically affecting visual artists, and that is framing, and that's both in the US and abroad. I'll talk first about some framing issues here in the US, perhaps with some positive news. Our first topic is the Goldman/Breitbart case, which some of you may know about. It provides an important framing precedent. Here's the filing for the case, which starts with a line that I think serves as a funny reminder of what

frames an image using inline linking when it uses HTML code to direct a user's browser to an image file located and transmitted from a server controlled by a third party, usually another website, in this case, Twitter. Yet it appears that the image resides on the website that the user is actually viewing.

On February 16th, 2017, Judge Forrest of the US District Court for the Southern District of New York issued a ruling in favor of plaintiff, holding that embedded or framing content from another website does not immunize content users from copyright infringement claims. The location of the infringed work does not determine whether a defendant has "publicly displayed that work in violation of the copyright owner's exclusive rights."

Forrest decisions rested in part on a blockbuster tech industry lawsuit, the 2007 case, Perfect 10 vs. Amazon, where a court ruled that Google Search could show full-size copyright images as long as it was simply hotlinking them from other sites. This established something called the server test, which protects sites that display copyrighted content stored on someone else's server, and this provided precedent in the US for the past 12 years.

But Forrest saw a clear and distinct

it is to monitor copyright in 2019 with a 1976 law.

When the Copyright Act was amended in 1976, the words "tweet," "viral," and "embed" invoked thoughts of a bird, a disease, and a reporter. This copyright case stems from a photo that Goldman took of U.S. football player, Tom Brady, with a GM of the basketball team for the -- GM for the basketball team, the Boston Celtics when the Celtics were attempting to recruit a player. We do not have that photo in question to share, but I'll illustrate it again with a different basketball image. This is by our member artist, Jacob Lawrence.

So let's pretend that this is the photo.

Jacob posted this photo to Snapchat. The photo was leaked from there and was posted to Twitter by a number of individuals. Several news outlets then, including Time and Yahoo Sports, embedded the tweets in online articles. Goldman sued for copyright infringement, asserting that this display embedded of a photograph posted on Twitter constitutes unauthorized "display of that photograph."

So the issue in this case is whether embedding images on a website through inline linking without authorization constitutes copyright infringement. As you may know, a website embeds or distinction between the search engine where users voluntarily search and click for an image and a news site where the user takes no action to see it: "Google's search engine provided a surface where the user navigated from webpage to webpage with Google's assistance," she wrote. "This is manifestly not the same as opening up a favorite blog or a website to find a full color image awaiting the user, whether he or she has asked for it, looked for it, clicked on it, or not."

The Court relied on language of the Copyright Act, including Section 101's definition of display, which includes showing a copy of a work by "any device or process" and transmitting or communicating a display by means of "device or process." The Court explained that the Copyright Act does not require a user to possess or to store at their own physical location a copy of the work to display it within the meaning of the statute.

So there's certainly a lot of interested parties in this case wondering how this will pan out. Obviously, people in the visual arts are quite satisfied with the courts' current interpretation of the Copyright Act, but this could eventually wind up on appeal and perhaps even end up in the Supreme

3 (Pages 9 to 12)

material.

Court.

Unfortunately, in Europe, the case with framing is quite different. There's been several cases, notably BestWater, that have ruled on the side of framers, calling a framed work only an infringement if it is a new communication to the public. And the difficult part with that language, of course, is every communication to the public is technically the same, both in the manner in which it's posted and the public being the same public because it's everything on the website.

And while there was a partial correction in the Cordoba case revising the public test, there's still a difficult situation in Europe, and this leads to real damage, both economically and otherwise. So commercial damage is an obvious one. Let's say you license an image of a photograph for 200 euro, and then if that's used on a website, you as the creator get that 200 euro. When we do -- when we're talking about framed works where the work is framed from your page to other sites, it's not only an issue with the individual framing, but it turns into sort of a snowball effect, where the use gets used multiple, multiple times.

So here in this case, this image was used on

institutions such as the -- the is the German Digital Library -- because they will not put in restrictions or technical measures to avoid framing. The image resolution on this site happens to be of high enough quality where these could be reframed and reused in ways that would deprive our member artists of additional revenue.

The fact that they can't do this means that we can't license these works for this initial use. One of the other issues we face in the US and elsewhere is fair use. Historically, fair use, for us, used to be a very easy thing to manage. And, in fact, we still at Artist Rights Society grant gratis permission for a variety of different scholarly, academic, museum uses that are requiring visual material, but, of course, making it available to the public now is a whole different thing when it's online. And a lot of museums and other institutions take an aggressive fair-use position, which means our images are being displayed on websites that could be relinked, reframed, reused in other ways, and our members are losing out on that revenue.

Perhaps some of this would hurt less if we had some collective rights here in the US, but unfortunately we do not. These are just some of the

391 different websites, and if we equate that with the real value of that image, it's a real loss of revenue. I'm trying to say a little too much in this slide, acknowledged, but approximately 35 percent of search images online are not licensed, which results into a loss of about 76 million euro.

I wanted to use this slide to show not only, again, the commercial values but a real control loss, which is a damage as well, too. The anecdote here is this photo of a boy eating a cheeseburger, which could be licensed obviously by the photographer for, say, 159 euro is what I hear from my colleagues. The loss of revenue for that image being framed in other places is one thing, but also because the users are not liable for the content they provide if the work is framed on another site, it could be used on, let's say, a pharmaceutical website or on an online newsletter and talking about a healthy diet and obviously maybe hamburgers are not supposed to be part of a healthy diet, but the end-user would not be responsible for the content because it's framed from somewhere else.

So another ramification also is preventing access. So many of our foreign sister societies that we're all part of CISAC with will not license to

1 collective rights that exist in Europe that we do not 2 have in the US. Especially painful is private copying

because that does answer a lot of questions about the
 digital sphere because a lot of our foreign societies
 are able to collect tariffs for private copying, which

are able to collect tariffs for private copying, which does result in compensation for use of digital

But all of this could change, of course. I'm sure this is going to be a big topic. The EU Copyright Directive, a huge win for creators, which was voted on Tuesday, and obviously this could mean great changes for our European colleagues and hopefully for us as well, too. The European Parliament voted to make platforms such as YouTube and Facebook responsible for copyright infringements committed by their users.

This opens the door for our foreign colleagues to issue collective licensing for these user-generated content providers and potentially provide that much-needed revenue for their use in the digital sphere. They have two years to implement this, and we'll see what that brings both them and us. And we look forward to that. And that is my presentation. You can find us on all these platforms. (Applause.)

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1 MS. ALLEN: Thank you so much. 2

MS. HICKS: Yeah.

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MS. ALLEN: As mentioned at the beginning, we'll save the questions for the end. But, next, it's my pleasure to introduce Vickie Nauman of CrossBorderWorks. Would you prefer to come to the podium or sit?

MS. NAUMAN: I can sit here.

MS. ALLEN: Okay. Vickie founded the boutique consulting and advisory firm CrossBorderWorks. She has an extensive background in digital music licensing, metadata and rights systems, product management, marketing, and international business, giving her a unique perspective on the global media landscape.

MS. NAUMAN: Thank you so much, and I apologize to everyone for being late. I used new technology of Lyft to get here this morning, and perhaps I should've used old technology of the Metro. I might have been a little more efficient.

So, you know, I came to this event last year, and I was really impressed because oftentimes I think the music industry, we're in our own little bubble and we don't get to cross-pollinate with other media types, and there are so many similar struggles.

labels, publishers, performing rights organizations. There has to be -- in order to develop a digital marketplace, there has to be a willingness to license, and there has to be a willingness and a capability of granting licenses and being able to execute on those licenses.

The next ring out is digital service providers and licensees. There has to be an appetite for developers and tech companies and startups to use music and build creative applications. Beyond that, you know, actually, you know, looking at these first three, a lot of people who looked at the early days of the digital music marketplace, they forgot about this ring, which is hardware, software, and networks.

In the early days, we didn't -- you know, there were some amazing ideas that were presented in the early 2000s, but we didn't have the hardware, we didn't have the software, we didn't have APIs, we didn't have networks to be able to bring those music experiences to life. We have those now. And this is a really important -- this is a really important part of moving beyond just a web-based world.

The next ring out is investment and, you know, financiers, venture capitalists being willing to put money into the music sector. And, then, lastly,

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And I consider music to be one of these canaries in the digital coal mine. So we're at a different place in the digital -- you know, in the definition of a digital marketplace.

So what I put together was really much more of like a 30,000-foot view of what has really happened, how did we get to where we are now. And so I'm going to go over that with you and really look forward to hearing more of the perspectives throughout the day.

All right, so I look at the whole marketplace as layers. And at the very center of this is the connection between artists and fans. You know, as long as artists are making music that fans love, I feel like there's a really healthy future in music. Many people in the industry in the early 2000s didn't agree with this, you know, and there was a point at which a lot of the music labels were actually feeling like recorded music, there was no future for it. I've never believed that. And I think because we've made access so easy, even through piracy, it has spurred consumption of music to be something that's far beyond anything in the previous eras. So at the center of this is artists and fans.

The next is industry licensors. So we have

it's legislative and trying to get the laws to be able to be current with the environment. And I love the quote that you just listed because this is exactly the case where we have laws that were created around, you know, piano rolls, and we are finally getting around to modernizing it, but all of these pieces really have to be in place in order to have a thriving digital marketplace.

And so when we look at where we are now, you know, music is doing pretty well from the surface. We have money flowing. There are people that are subscribing. There's revenue that's getting passed from the user through a DSP into the rights holders and to the artists and creators. But how did we get

So if we look back to the era, from 2000 to 2006, this is really where the original Napster disrupted everything. And I've been involved in this from the beginning. In fact, I worked at one of the first digital music services called MusicNet, and at that time, I remember trying the original Napster and seeing songs download onto my laptop, and I had a hardware/software content, you know, networks. I had a 14.4 modem. It took over three minutes for a song to download onto my laptop, but I saw millions of

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people in there, and I thought this is amazing. All we have to do is legalize this. All we have to do is legalize it and everyone's going to make so much more money, it's going to be great.

And then I went to work at one of the first services and I realized, okay, this is going to take a while. But in this era, a lot of what -- a lot of the battles, and I see lots of familiar faces in the crowd who were around in that day, lots of the battles were really, you know, what is the model, will people pay for music, how do we compete for free? We had every metaphor imaginable, you know, bottled water, tap water. And it really came down to, you know, just all these different battle fronts.

But there were several things that were real catalysts in the early days. One was iTunes. And iTunes, good or bad, developed the download model and they dominated that marketplace, but it established norms in the marketplace. And some of these norms needed to be done by a big company like Apple to set the pace for it. But what we also started realizing was, you know, that just the pace at which everyone was changing laptops, and cell phones, that it made porting your songs from one device to another just became more and more inconvenient.

smartphones started to proliferate, that really changed the landscape, and it changed the paradigm of how people consume music. And it became more about access. Now, we can argue business models all day, but I think what we really had to do in order to get these services across the line was start to create norms of how to license and who to pay what percentage. They're certainly not perfect, but what we've seen is a massive growth in the people in the subscribing base, as well as the legal usage base into these DSPs that are offering access-based models.

And that leads to where we are now, which is really the streaming era. And this opened up a whole can of worms around publishing and around data and metadata, and it wasn't really until the end of this era -- the middle era of around 2013-2014 that rights holders and many traditional stakeholders in the industry actually believed that streaming was here to stay.

And the reason that it took so long for everyone to buy into this model is because, you know, many of the people who are here are in the church of streaming and access, but in the earlier eras, I mean, there was every business model imaginable. We had downloads, tethered downloads, limited downloads,

And so, you know, we saw the evolution of different business models that were also driven by the networks, by hardware/software, you know, by the little devices that could store MP3s. And we, eventually in this era, started seeing that there was a renewed confidence that people would pay for music that they loved, even if they had already bought it in CDs and vinyl and other formats before, that music increases and continues to retain value to the consumer, and we really just as an industry needed to come together to create different models that were legal alternatives to piracy.

The DMCA was a really important part of this early era, especially in radio-style streaming. I think if we hadn't had the DMCA it would have been almost impossible for anyone to really get a legal model out into the marketplace because it provided some guardrails. From 2007 to 2013, I really define this as a different era because this is -- the iPhone is out, so we have smartphones. We also have bigger networks. Streaming started to become something that was more of a convenience. There was a -- you know, there were a lot of early services like Rhapsody and Napster that had limited appeal and Pandora.

And once streaming and iPhone and

radio-style streaming, every kind of model you could imagine all of the rights holders had to wrap their head around. And streaming -- on-demand streaming was just one of them.

And we had had a lot of companies like Rhapsody and MOG and RDO that had tried and had not gotten the traction. So once Spotify really came onto the scene, it was simultaneous when YouTube really started to produce tremendous volume, and we started to see money not just being paid from the DSP to the rights holders for their licensing agreements and minimum revenue guarantees, but we also started seeing money coming out the back end. And that really was a paradigm shift for the rights holders and for the broad industry in general that, hey, we think this is actually working.

But what happened is simultaneously the volume was so tremendous that it became almost like an avalanche. And very, very few companies were able to cope with it. So I would categorize 2015 as the era -- as the year when everyone believed that streaming really had a place in the marketplace and that it was going to be the consumption pattern for the foreseeable future. And then 2016 was the year that everyone realized we don't have the

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infrastructure to manage the volume of data, we don't have technologies and capabilities to be able to process any of this, and we also have a significant problem in the US around mechanical rights.

So the passage of the MMA I consider to be really fundamental to the future of our industry. And one of the problems that we saw all throughout these early years was the time to market. And from a technological standpoint, the market shifts so much and so quickly, and it took maybe three to four years to get a full set of rights for a streaming service for -- from labels, publishers, and PROs. And so we saw something that was really out of sync with the market, that it took so long to develop the licensing structure that by the time you deploy a service, there are already three others that are competitive, you know, duplicates of what you're doing.

And one of the things that I think no one has really spoken about with the MMA and the establishment of the MLC is it's going to shave off a tremendous amount of time for new entrants to get those rights from a publishing standpoint. And that's really exciting because in order to continue to attract consumers, we have to keep the user experiences at pace with all of those that are

money flowing from a systems standpoint, and to also look at, you know, segmenting the music marketplace. And music is traditionally very tribal, so how can we better serve some of the small niches of music fans that may not necessarily be pop and the top of the charts but there's still a lot of value in that.

So that's all I have to say, and I'll pass this down to you.

(Applause.)

MS. ALLEN: Thank you so much. I invite Neil Fried, who is representing the Motion Picture Association of America. Neil represents MPAA's six members -- Walt Disney, Paramount, Sony, Universal, Warner Brothers, and Netflix -- before Congress in the administration on matters such as copyright and communications law.

MR. FRIED: Thank you for inviting me today. I have a positive story to tell. It's almost a cliché now. People say that we're in another golden age of movies and television, and the reason it's a cliche is, to be honest, it's actually kind of true, and these trends, I think, will tell you that.

So on the supply side, we now have 1,144 lawful online services through which our industry is making our movie and television content available.

developing experiences that don't have a four-year lead time on licensing.

So I think that, you know, the Music Modernization Act is -- I'm focused on the implementation of this. And I think that we have an opportunity to build something that is open and transparent and interoperative with the rest of the world industry. We have a window into a very big problem of data and getting money flowing through the system into the rights holders. And, you know, we also have emerging markets, and this is truly a global marketplace right now.

So I'm very bullish about the future of music, but we've gone through so much trial and error, and it largely took us 15 years of trial and error to get to the point where we had a model where we could focus on the consumers that were paying and focus less on those that were stealing and pirating music and really developing user experiences and value propositions for music fans that they were willing to pay for.

And, now, we're -- you know, we've kind of established -- we have four or five big companies that are offering music catalogs. I think the next wave is really the emerging markets, you know, how to get

You can see the growth. I'll point out that since 2013, when the green paper was published, we've already seen an 80 percent increase in the number of lawful services, a whole variety of them, more every day, as you all are undoubtedly aware. We now have Apple in the marketplace as well. I imagine there will be others. Lots of experimentation going on.

On the demand side, that's also a very positive story, so this is the number, 11.5 billion movies -- full-length film accessed by consumers in a year. That was 2018. All right, so one year. That many views and transactions over these lawful, online services. That's 150 percent increase since 2013.

And you get to television. Obviously there's more. You know, a movie is a little longer, and there are fewer of them made in a year. We've got television episodes all week. So we've got in the TV space -- and these numbers are astounding, but this is why we're so optimistic -- 170.6 billion television episodes accessed lawfully online in 2018. That's 175 percent increase since 2013.

On the production side, what does all that mean? Well, we've got distribution and we've got demand, and so you get more product. This is the number of scripted original programs, not reality TV.

Actually produced, scripted programming, up to 495. Again, the growth is astounding. We're starting to see maybe it's peaking.

This data comes from FX, and every year John Landgraf predicts we've hit the top, and every year, we got a few more, and, again, with more players, right? I mean, we have Apple announcing a whole slate of -- I think I saw 22 titles already announced. The great thing is that with this technology, consumers are finding ways to access content when and how they want, and they are filling up their day with great content that we're producing.

And then, of course, online. This is just online original content, scripted programs for online only. Again, huge growth. This is great for obviously all of our companies. And some people think that we're somehow in competition with these online platforms. What they forget is that we both do production and distribution, so many of these online exclusives are actually being produced by our members and others as well. So this is a great story for everybody. On the scripted originals, I came up here to give you the stat. The 495 overall is a 40 percent increase since 2013. And here's the whopper, 160 scripted original programs online is a 560 percent

protecting and preserving the lawful online marketplace, not the unlawful marketplace. And just like all lawful services starting to move towards streaming, so, too, is unlawful service.

So, right, the stats -- this is 2017. There were 542 million movies and TV shows still pirated over peer-to-peer, but that's now actually less in terms of the number of visits where consumers are going for pirated content and where distributors of pirated -- unlawful distribution is going. It's also to streaming. So right now, streaming piracy is 37 percent of the visits to unlawful sites for content compared to 36 percent for downloads and 27 percent for peer-to-peer.

You may have been hearing a lot about Kodi boxes and online devices. That's a big problem for us. The last stat is that 6 percent of North America -- US and Canada -- had these devices in their homes configured to access essentially pirate websites, making it much more seamless. Instead of the old peer-to-peer download model, now it's streaming models connected to your TV, a lot easier to consume. And that 6 percent comes out to about 6.5 million homes.

One estimate I've seen, which may be low, is that the annual ill-gotten gains of this type of

increase since 2013.

So what does this say for me? Copyright works, right? The genius of recognizing intellectual property is it creates a market. And good things happen when you have a market, right? We have creators, distributors, and audiences, able to enter into an almost infinite number of relationships to get content created, distributed, and to an audience.

And they experiment, and that's why we've been able to take, you know, from the more traditional distribution mechanisms to what we're seeing today, and also to the experimentation and all sorts of new players. So already online we're seeing, right, ondemand models, subscription models, and ad-supported models, right? Pluto TV, recently acquired by Viacom, an ad-based service. There are a number of even adbased services online that are arising. So this is all great news, right? We are very positive.

We're not really looking for a lot of help in the creation of the marketplace. Of course, there is always a downside, right? And just as lawful online distribution is occurring, it's also happening illegally, right, and that's the downside. Again, we are still positive in the marketplace where we need the help, where we need the collaboration is in system is \$840 million a year. And that's not just a problem for us, it's a problem for consumers on two fronts. One, it does start to affect our ability to produce all that content because we're competing against unlawful and free. And when you spend \$100 million typically or more per movie, a million dollars per episode, it's harder to provide as much diversity and as much content and as much quality when you can't make up that money in essentially the secondary market.

Many people don't realize, but only 4 out of 10 movies actually make a profit in the theaters. Others either break even or lose money. And so the secondary market is very important to us, and when we're competing against illegal and free, that's getting hard to invest money into the content. But the other reason why consumers should be concerned is malware. One-third of these pirate sites are actually putting malware on consumers' computers. So those are the two real concerns.

So what are we looking for? And I mentioned it sort of at the top, it's voluntary initiatives and collaboration. What we've done, actually, to quite success is work with other internet intermediaries. We're all in lawful businesses, and quite successful

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businesses. And what any lawful business should want to do is promote the lawful, and there's no need to facilitate the unlawful.

So payment process, this is a great story. What was happening is that a lot of -- you know, any pirate operation wants to get paid, and they were using Visa, Mastercard, and PayPal. And so we reached out to Visa, Mastercard, and PayPal and said, look, you know, you're probably not aware of it, but a lot of these transactions are for unlawful distribution of content. Will you work with us? We will give you indicators of how to spot essentially illicit activity using your financial network. And we did that, and they are working with us. They are now trying to prevent their networks from facilitating piracy. A good story for us. You know, never done, but a good collaboration in the marketplace.

Another one is advertising. If it wasn't subscription revenue, it's advertising. Many major brands are showing up on pirate sites, unbeknownst to them because of the complexities of getting ads in front of users on the internet ecosystem. We reached out to advertising networks and said, you know, you really don't want your quality brands on some unsavory sites. And it wasn't just piracy. A lot of these

we have those voluntary initiatives, and in some cases we need more of them and others. So that's really our hope is that we can facilitate that positive legal marketplace by not so much facilitating the unlawful stuff that we unfortunately have to compete with. Thank you.

(Applause.)

MS. ALLEN: Thank you, Neil.

Our next presenter, Edward Hasbrouck, has been cochair of the Book Division of the National Writers Union since 2009, leading the union's advocacy on copyright, digitization, and digital media issues. He also currently serves as the representative authors of text works on the Board of Directors of the International Federation of Reproduction Rights Organization and as an observer to the Authors' Rights Expert Group of the International Federation of Journalists.

MR. HASBROUCK: Since this is, I think, the first time that a writer has been invited to speak to one of these events, I'd like to give an overview of the ways that writers monetize our words. There are many marketplaces for writing in digital formats, and there is no typical writer. Most working writers aren't making a living from our writing. And the most

sites had a lot of other unsavory characteristics about them, not only just sort of identity theft, but were advertising for products you probably don't want your product next to.

And so the advertisers are being fearful about where they place their content. Again, another positive story. We need more of that. We need intermediaries to work with us in promoting the lawful, and where we're not really seeing that is stuff like hosting services, reverse proxies, and domain name providers, who all have terms of services that you shouldn't be using our service for unlawful activity but don't seem to be working as well with us as the payment processors and the advertisers to make sure that their very valuable and very successful services are not also facilitating illegal activity. So that's really where we start.

And if you think about it, the DMCA really was an attempt to create a voluntary initiative scheme, right? The idea was that there was a shield as Senator Wyden points out, liability protection in exchange for working collaboratively for intermediaries and online platforms, to work collaboratively to take down content. And it's just, unfortunately, not working on some examples. Right,

commercially successful writers are the least representative of the long tail.

Most writers can't afford to leave even small amounts of potential income on the table. Like other workers with multiple jobs, most writers have multiple income streams, often from very different business models, and different writers prioritize different ways of monetizing our work. But there are, in general, four dimensions according to which one can categorize the ways writers turn words into dollars: according to business models, sources of revenue, publication formats, and whether we're exploiting new or old works.

Business models include employment as a staff writer and freelancing. They also include not only at the bottom of the list self-publishing but in between employment and freelancing the kind of independent contracting in which people may be getting an hourly or monthly fee and sitting next to staff writers doing the same work.

As contractors, their work is not considered work for hire, but they have none of the rights of employees such as to minimum wages or collective bargaining. Unlike most workers who unambiguously benefit from employee status, this creates an unfair

dilemma for writers who in order to obtain the rights of employees have to forgo their copyrights and have that work be considered work for hire.

Revenue sources include wages, as I just mentioned, both wages and wage-like contracting fees, as well as sales and de facto sales through all-rights contracts. They also include licensing, but while there are writers who make much of their money from licensing, there are other successful writers for whom licensing is insignificant. You cannot equate monetization solely with licensing.

Advertising is, of course, the primary source of revenue for many digital formats and is structured very differently from licensing. And subscriptions and membership are more significant than is often recognized. Patreon isn't the first or the only platform for members-only web content. And while there are relatively few successful paid subscription websites, there's a large industry of paid subscription email newsletters, which brings us to the dimension of publication formats.

Written work can be distributed as web content, of course, but it can also be distributed through an app -- recipes in a cooking app, sightseeing information in a travel app. Digital

the last 25 years.

These dimensions of monetization are independent of each other. A professional blogger, for example, may be a staff writer whose job is writing the company blog, or they may be an independent contractor paid a monthly fee or a freelancer paid a percentage of the ad revenue for each article she contributes to the blog, or she might be a self-publisher of her own blog.

And these dimensions are equally applicable to all genres of writing. A blog can be monetized in the same ways regardless of whether it contains poetry or flash fiction or news articles. We think of the paradigmatic writer as a novelist or a journalist, but in the digital environment, a successful writer may be getting paid to write marketing copy or product descriptions for an e-commerce website.

And a writer may choose to distribute and monetize a particular work in as many ways as possible, but she may also make a deliberate choice to offer a work in only the one format she thinks will optimize her revenue. The fact that a work is not available in a particular format or channel is as likely to indicate market choice as market failure.

When we consider all four dimensions of

downloads include not only e-books but also downloads of short-form works that will be hard to monetize in printed formats. And while most people think of email as a one-to-one communications medium, it's also a publication medium, used to distribute a wide range of marketing communications and paid subscription publications.

Finally, the multimedia formats in which text can be included have expanded from movies and videos to include electronic games and virtual reality experiences. And in a final dimension, a writer has two types of assets from which she can generate revenue -- her labor power to create new works and her ability to monetize her rights to work she has previously created.

Just as much of the net worth of a corporation may be its intellectual property assets, a writer's personal backlist may be a substantial part of her net worth. Rights to many backlist works have been difficult or impossible to exploit in print formats, but the internet has unlocked a treasure chest of value in digital rights to works that were previously either unpublished or published only in print. And disputes over ownership of that rights windfall have been central to the conflicts over writers' rights for

monetization, there are 200 different ways for a writer to earn money from writing distributed in digital formats. Each writer might have a different mix of income from different combinations of these modes. But what is each of these marketplaces? A marketplace is composed of entities and contracts between them. Each of these marketplaces has a different typical set of entities and a different set of typical contracts between writers, readers, intermediaries, and sources of income who may not be the readers.

Only if we are aware of this diversity of marketplaces can we assess how they are changing or the implications of new policies, technologies, or business plans. Most such assessments to date have focused only on some subset of this universe of marketplaces. I challenge the Government and industry statisticians in this audience to collect, compile, and publish more comprehensive data on the full variety of marketplaces for digital text.

Similarly, many procedures devised for print format, such as those for registration of copyrights, have been made workable for only a subset of digital formats. Decades after the worldwide web became the primary medium for the distribution of text, the

Copyright Office has yet even to propose any registration procedures for dynamic and granular web content, just to give one example.

Policy analysis is also distorted by lack of awareness of the diversity of modes of monetization. The prerequisite, for example, to applying the test for fair use or other exceptions and limitations to copyright is an awareness of the potential markets for the works at issue. A common error is to assume that some activity will not interfere with the marketplace for a work without realizing that it will interfere with many other unnoticed marketplaces for the same work.

Proponents of so-called controlled digital lending, for example, claim that scanning books and distributing the full text online won't interfere with the e-book market. Even if this were true, which it isn't, it ignores the many other markets for works that have been included in printed books. Exceptions, limitations, and compulsory or quasi-compulsory licenses are often justified on the basis of false claims of market failure when, in fact, the nonavailability of a work in one market may simply reflect the writer's market choice to monetize it in a different way.

creators, writers are also business and technology innovators. Looking ahead, many of the trends we are leaving involve shifts in the balance between these modes of monetization. That includes some relatively obvious trends and some that may be less obvious, although no less significant for both business processes and policies.

The high potential return on the investment of time for digital exploitation of writers' personal backlists, for example, confounds many assumptions about which rights are primary and which are secondary. It also highlights the need for reform of Section 203 of the Copyright Act to ensure that writers are able to remix and obtain a fair share from revenues from reuse of our own previously published work.

In the world of print, markets have been segmented geographically, but on the internet, a single website can reach readers worldwide without the need for local distributors. Instead, the ways in which a work is distributed and monetized can vary over time as markets change. Enforcement of timelimited licenses poses challenges which have not yet been addressed for caching and archiving of digital text.

The debate over orphan works may be the most obvious example of where this leads. Proposals for orphan works legislation has been based on the claim that if the rights holder can't be found and a potential licensee can't transact a new license, the work necessarily is not being exploited. But it should be obvious that many modes of monetization, such as advertising, require neither identification of the rights holder nor any transaction between reader and writer.

Many writers earn their living through advertising on anonymously self-published websites that are by definition orphan works regardless of how actively and successfully they are being monetized. It's more or less trivially easy for anyone familiar with how writers actually earn our living to come up with multiple other examples of works that are being monetized in ways that don't require finding the rights holders. The fact that we've had more than a decade of discourse about orphan works without yet beginning to think about the ways that orphan works are being profitably monetized today reflects how completely the realities of writers' livelihoods have been ignored in policy studies.

It should be obvious or no surprise that as

I've only scratched the surface here, but I hope this taxonomy of the many marketplaces for text and digital formats and these examples of why and how it matters will help inform your thinking and your work today and in the future. Thank you.

(Applause.)

MS. ALLEN: Thank you very much, Edward.
And just before turning to our last speaker,
just one note is that this is very much a stakeholderdriven conference, so I invite anyone in the audience
or online to come forward with ideas for us. And
Edward is one prime example of this where he viewed
our conference and says, hey, there's something
missing here, I want to present on the advertising
aspect of this as well. And that is why he is here
today, as well as the overall picture.

As he mentioned at the beginning we have not had a writer representing text here before. So, again, it's an invitation to anyone to please, you know -- we welcome feedback. This is intended to be a stakeholder-driven event.

And finally, last but definitely not least, Danielle Coffey is a Senior Vice President of Strategic Initiatives and Counsel for the News Media Alliance, which represents 2,000 news media outlets

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worldwide. Danielle focuses on digital policy issues and strategic initiatives for the organization, building better partnerships with tech platforms and urging for a more favorable regulatory environment for the digital distribution of news content.

MS. COFFEY: Thank you, Susan, and thank you for having me. You're always a pleasure to work with. You and David and Michael have been very eager to learn about the issues that we work on, so thank you for that. And I do represent the News Media Alliance, and we have 2,000 members in the United States and internationally. We have a positive story to tell, too, so I'll join my friend, Neil, in pointing out that our audience, because of the innovative devices and services that you can now digest news over, is through the roof.

So the trajectory is from 46 million to 136 million over the last 10 years, but that's where I part ways with my friend, Neil, because the good stops there because unfortunately our struggles are on the monetary side. And over the same 10 years, the trajectory is in the other direction, and that's because, as you can see, we've, you know, lost half of our revenue because we primarily would get it from print advertising, which is in an accelerated decline

is valued, but we're not seeing the value of it. And that's because of three things that I'll go over. This first one is digital advertising. In the digital advertising ecosystem, we're not alone. We get a very small piece of the pie. The majority of the digital advertising dollar goes to Google and Facebook. In fact, they take 85 cents on the dollar from -- and we're left with the remaining 15. The growth is at 90 percent for the same two companies.

However, like I said, we're not in it alone. This isn't a unique problem just to the news industry. We realize we're in good company, but what we do struggle with is the fact that it doesn't reward quality. So the cookie will follow the user. So the user will go to look at, say, skin cream, and then they'll -- face cream, what have you. They'll go to a website. Let's say it's the LA Times, and then they'll next go to a cheaper website, let's just say TMZ, which is also in LA. And the advertiser will be able to pay a cheaper cost for the same person now that they can target the person and not the content.

So to what has been discussed previously, when an advertiser wants to be found with premium content, in the programmatic world, that's no longer an option, and therefore quality just isn't rewarded.

and that has not been replaced by digital advertising or digital subs -- digital subscriptions.

So what's changed over the last 10 years? We used to have a very personal, intimate relationship with our readers. We were the only product that would actually be walked up to your door and handed to your -- you know, handed to you. The closest thing to that now is I think Amazon, but we used to have a very intimate relationship with our reader, but now when you go to the internet to digest our content, you're met by two large companies, Google and Facebook.

Google is the search engine, so it's more like if I was going to tell you, you know, A4 has a great article on the Mueller report or whatever the news is of the day. You would now go to Google and you would search in Mueller report and you would find that same article.

Social, so Facebook acts more like a front page. So it tells you what the hot news of the day is. And in that respect, we enjoy the traffic, which is that's primarily our referral traffic. It's 67 percent from those two companies. However, the problem is that the revenue that we receive is only --from that same referral traffic is only 16 percent.

So there's a drastic mismatch. Our content

So that's the advertising space.

In the subscription space, that would be where consumers can really show, as they have, that they value our content, that they're willing to pay for it. And consumers are willing to pay for it. Millennials are paying for it at 20 percent. That's, you know, up from 4 percent. That's a huge increase, and there's just -- there's a conditioning, like the water bottle we were talking about. People are now willing to pay for things they may not have previously been willing to pay for.

However, like I said, our content, our intermediaries, which is where we're found on Google and Facebook, like I said, they're incentivized to get more data because that's what they're driven by. That feeds the ecosystem that they make money off of. It's a fact.

We've been told that paying for content is not an enjoyable consumer experience. And our CEO always says, look, if I went to a bar and I didn't have to pay, that would be a great, great experience; however, at the same time, we invest a tremendous amount of resources in journalism and in news rooms and in the time spent that goes in uncovering these stories, so when we invoke a pay wall and are

penalized for it -- and we had a struggle with first-click-free. It was a policy that was recently overturned by Google because we were being penalized and deprioritized in search results if we had a pay wall. That is bad for our business, so we may just be in conflict fundamentally with the model of data versus subscriptions.

And, then, the third is more relevant to this group, which has to do with copyright, and that would be the more common way of protecting your content. But, unfortunately, the news industry has had a stream of bad cases, bad decisions. And it's been difficult to monetize through the copyright and IP ecosystem, although I will say that there is a positive, hopefully, change in that.

As far as the case law, as you may or may not know, the Copyright Act does not allow the copywriting of fact -- the protection of facts. However, this INS decision, it was 1918, that resulted in the hot news doctrine you might be familiar with, would still allow for breaking news to be protected for an exclusive period of time. It was created because of the wiring back to the West Coast and then you don't get the paper and you don't get the reward, so it was allowing you to have protection for a period

actually promising.

And then the second part of it -- so the first part is really the case law. The second part is really even if we had the right, we still -- if we want to be found -- the dominance of the platforms, there's no -- where else are you going to go? If you want to be found on Google search, if you want to be read, then you have to essentially waive any copyright you may or may not have. And that's in their terms of service.

So it's a false choice really. So even if you did have the right, could you assert it? Under the circumstances we're currently in, no, no, you couldn't.

So a positive development for copyright in our space was just decided on Tuesday. We're very pleased with now Article 15. It was Article 11, it was -- it began in 2016. This has been a very long fight for the Europeans. And we represent Axel Springer. They were at the helm of it. They really took the lead on this, and they pushed for a recognition. They actually don't have a copyright protection for publishers in Europe. So across Europe, they just didn't have it.

So the copyright directive included a

of time.

However, a recent case undermined the hot news doctrine because it said that the copyright actually preempts that, and so that makes it more -even facts such as, you know, Dow Jones releases their numbers or sports facts or what have you. And that makes it difficult across the board for us to protect our content, even for an exclusive, even for a short window of time. And so when we invest a ton in stories, so for example, the Theranos story was -there were millions put into that story to uncover it. It only actually -- The Wall Street Journal uncovered it. It actually only sat at the top of the feed for about -- on an average of six minutes, original stories, before they're picked up by others who just, you know, you'll responsibly cite, that's what we do in our industry, however, not everybody's responsible, and those will just be lifted up, and because of the incentive to click, therein lies the problem.

And the last thing is Google News. It's where we live, is where a lot of our content lives; however, again, a stream of unfavorable decisions for our industry have resulted in a questionable protection of our content, including through Google News, although the Fox TVEyes recent decision was

publisher's right. The resulting language is that it protects single words and very short extracts. That was language that was put in to restrict what aggregators, including Google News, are required to now negotiate with news publishers for the use of that content. Very short extracts was a term that was in negotiation with counsel, commission, and the Parliament, and their trilogue negotiations was inserted.

And it may have limited the protection; however, there was a recital that was also included that said this language, "very short extracts," is not to undermine the intent of the intended protection here.

So we feel like it's a strong protection of news content. It's not a link tax. First of all, it's not a link tax because it doesn't protect links. You can share links freely. Consumers can share information freely. That's explicitly exempted from protection.

It's also not a tax because it's negotiable; it's not required to be paid. So if taxes are now not required, please tell the IRS, and I would like to not pay my taxes. So link tax is just -- it's a misnomer, and it doesn't describe what was the result here. And

the vote was ultimately on Tuesday 348 to 274 in favor of the publisher's right, which we're now going to work with our counterparts to see what that means globally.

The solution we see here in the United States is an antitrust safe harbor for news publishers to collectively negotiate and withhold content for better terms from the tech platforms. It's limited in time; it's limited in scope; and it allows us to come together to be able to have a fighting chance to be able to talk to the tech platforms about what we would see as a better partnership and what we would need to have better business arrangements so that we can sustain quality journalism.

We expect introduction of that soon by the Chairman of the Antitrust -- House Antitrust Chairman, David Cicilline with a Republican lead. We're very excited for what this could do for our industry. And because of what happened with the book publishers, it's had a chill -- what happened with the book publishers when they tried to negotiate with Apple to get a better deal because they were being undercut by Amazon, they got sanctioned by the DOJ, and that had a chilling effect on our industry's ability to come together.

THE DIGITAL MARKETPLACE: TECHNOLOGY INITIATIVES

MS. ALLEN: So I now invite Jack Rutledge to take the podium. Jack is currently the Senior Manager of Product Management at Amazon Music, where he leads product development for the catalog teams who ingest content from record labels and generate product metadata that drives the listening experience on Alexa, mobile, and desktop streaming apps.

During his seven years with the company, he has played a key role in launching new music offerings, including Amazon AutoRip and Amazon's music streaming tiers, Prime Music, and Amazon Music Unlimited.

MR. RUTLEDGE: Sorry, apologies. Is that better now? Okay, thanks.

Let me just check and make sure Alexa is awake this morning.

So I'm going to talk a little bit about just a quick overview of the Amazon music business and then talk about my role as the leader of our product development group for music catalog, and then I'll show you some stuff on Alexa.

So Amazon Music, we've been in the music business now since 1998. It was the second category for Amazon after books with our CD and vinyl offering.

So this is something that we need to -- it's a market-based solution, it's nonregulatory. It would remove government; it wouldn't give us -- it wouldn't be regulatory against the platforms. And this is something that we're looking for and that we're championing in Congress right now. And that's it. Thank you.

(Applause.)

MS. ALLEN: So thank you, Danielle, and I realize it is now 12 minutes after 10:00 and we have another presentation, but we can cut into the coffee if anyone has one or two quick questions.

No? Going once, going twice. Okay.

Thank you all for your time today, and we very much appreciate your presentations. Thank you.

(Applause.)

And then in 2007, we stepped into the MP3 download market with our MP3 download store that's still live today. And it wasn't until later that we launched our streaming offerings, and we now offer Prime Music and Music Unlimited, Music Unlimited being the larger full catalog subscription service. And both Prime Music and Amazon Music are available to Echo and Alexa customers.

So the Amazon Music catalog, we're the primary point that receives all of the information from record labels and distributors about music. So we -- through the DDEX supply chain feed, we get all of the information about the products that comes in the door, the audio files themselves. And then we have this big job on the catalog side to get all of that content ready for our customer experience.

So it starts with our mobile apps, IOS and Android, our desktop app, our web player. But then we also have this offering of playlists and stations in our service, so we have to work with that content so that our music curators can find it in our catalog and make it into the playlist that customers hear.

And then lastly but by no means least importantly is Alexa. So we have a large challenge to get all of this music content ready for the Alexa

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experience that I'm going to show you in a little bit. And we've been working on -- for a number of years on that.

So I want you to meet Alexa. Hopefully, some of you are familiar with her and the Echo family of devices. And when we started out thinking about how we wanted to make music work for our customers on Alexa, we really wanted it to be like you were having a conversation with your friend that's, you know, your best friend that's knowledgeable about music. And we started out with some very simple use cases. So, here, this -- Alexa, play Paul Simon songs from 1986.

ALEXA: Paul Simon from 1986 on Amazon Music.

(Song begins, "You Can Call Me Al.")

MR. RUTLEDGE: Okay, so we got that one right. But when we first started, there was a little bit of a problem. So this is our internal catalog view of the metadata that we received from the distributor for Paul Simon's Graceland album. And I've blacked -- I've redacted some of the details so that we don't place blame on this specific provider, but suffice to say this is not like one entity. This is prevalent across the catalog.

And there's lots of reasons throughout the

we've seen customers asking for these types of features to understand more about the music that they're listening to on Alexa. And, you know, I think we'll hear a lot later on today about this specific challenge, but suffice to say there's lots of interesting ways in which we see our customers wanting to interact with this voice technology that requires us on the catalog side to partner with people in the industry and figure out how the right metadata can come into our service and then let us get it out to customers such that they have that experience that I just demoed for you.

So that's all I wanted to talk about, so thank you very much, and I hope you enjoy the day. (Applause.)

MS. ALLEN: So wonderful. And I just -- you know, we're branching now from a discussion of the different industries really now into the technologies, so these presentations are first voice recognition, and now we'll have Blockchain, followed by fingerprinting, watermarking, and search.

So I invite Ken Umezaki to provide an update on Dot Blockchain Media. Ken is the CEO and Cofounder of Dot Blockchain Media, a company that has introduced a new music file technology architecture to modernize

development of digital music for why, in fact, in this case, the original release date of Graceland is marked as 2012. But obviously with that information, the experience that I just showed you on Alexa wouldn't have worked. So we spent years researching and correcting data, finding out where he had errors so that we could make sure that when a customer asks for the music on Alexa that they actually get the right response.

And so now I'm going to show you something that we've been working on that's, you know, the next step a little bit further. So the first part of it's pretty straightforward.

Alexa, play Havana.

ALEXA: Havana by Camila Cabello, featuring Young Thug, starting now on Amazon Music.

(Song begins, "Havana.")

MR. RUTLEDGE: So we got that one right.

Alexa, who produced this song?

ALEXA: Havana by Camilla Cabello was produced by Frank Dukes and Matt Beckley.

(Song continues.)

MR. RUTLEDGE: So this is a little bit harder than just correcting the date for Paul Simon's

Graceland for us, but we think that this is -- and

copyright management and media supply chains fit for the digital media age. Ken acts as an experienced independent investor and business advisor for music startups and artists through his company Digital Daruma, with a specific focus on artist-facing music and media services company. Welcome.

MR. UMEZAKI: I also need a few minutes or a few seconds to set up.

So we've been at this for three years or so. We're primarily sort of an attempt to modernize rights management data and leveraging sort of current technology to do that. And we realized as we started on the journey that this actually could apply to many different media categories. We're starting with music, obviously, so I'll hopefully have a moment to show you a few of the things we've been up to the last couple of years, but that was the reason for the change in the name is we realize that it's probably applicable or should be applicable to other media verticals.

Oh, here we go. Well, my apologies again. I'm Ken Umezaki. I'm the CEO of Dot BlockChain Media. I have two demonstrations, which are essentially sort of what we're surfacing as use cases, if you will, for our underlying data architecture and our data

technology solution. So I'll start with a just a real simple slide to kind of go through what our solution is intended to sort of represent and then talk about a couple of the use cases through a demo.

So this is the sort of very, very simple question with a devilishly difficult answer, which I think all of us in the room have at some point in time or forever been trying to figure out, is who owns the rights to this thing, right, any media asset. And in our case, we're focused on the digital music part of the world. And our solution kind of looks like this.

So there are four types of data that historically have been managed or have become managed in very, very separate silos. And the idea is to actually create a bundle of those data sets. So the audio file, the metadata that describes generally the recording or release, ownership or works data, if you will, on the composition side, and also potentially licensing. We're focused on the first three at this point in time.

Is there a way to leverage technology to actually synchronize those things? And in our opinion, or our solution includes leveraging some blockchain technology to actually accomplish that.

So what I'd like to do is actually just show

The work's bundle contains identifiers and ownership metadata of the underlying musical work. When a work has been matched to a master end release bundle, you get a full view of who owns both the masters and publishing copyrights to that song.

As a member of the public, you are able to see certain public-facing information, but you will be locked out of seeing anything that would be considered proprietary. Once logged in as your user role, if you've been granted access to edit that data, view that data, or if you're the owner, you'll be able to see this private information such as ownership splits on this work.

Depending on your role, you will be assigned as the owner of one or more of these bundles. For example, let's say you're the artist who wants to update the name of your song. Since you're the owner of the master metadata, you can simply open the editing interface, find the song title, and change it to whatever you want. And don't worry, your old song name is still there if you change your mind. Since your metadata is synced to the blockchain, metadata is never deleted, only amended.

Now, let's say you want to change the release date of your album. Since your record label

you two quick demonstrations -- they're both videos -- of a couple of ways this manifests itself. The first one is going to be related to a music publisher's perspective. We've been working with a major label and a major publisher for about six months now, and we're just finishing off our initial, if you will, project with them. And this is the UI.

By the way, there's no crypto; there's no blockchain description in any of this. We can talk about that during the course of the day if you're interested, but hopefully you'll be able to hear this.

VIDEO: Before we dive in, let's go over some of the basic concepts in this UI/UX. First, your data is organized into dot.BC bundles. These bundles contain the fundamental data underlying a song, including its metadata, audio data, and image data.

The master bundle contains data like the song's name, audio, artist, and collaborator information. Anyone who contributed to this specific recording of the song is recorded here.

The release bundle contains the metadata of the specific release this song appears on, including the title of the release, the type of release like single, album, or collection, and any associated cover art image. owns the release, you need their permission to edit the release metadata. First, you'll request access to the release bundle. Once you've been granted access by your label, you can submit an amendment request to any metadata in the bundle.

Keep in mind, this change will have to be accepted by the label since they own the bundle. They can approve your change, reject it with comments, or reject it with suggestion of their own.

We are also using an API call to our partner, Exactuals, to match ISRC and ISWC to all known public matches. This will bring back an ISRC and UPC suggestion, both found in RAI but maybe not found in our catalog, and also matches that are found within our catalog. For example, you can see the blue tick there. This ISRC and UPC has been found within the catalog.

If you'd like to associate the ISWRC and the ISRC that you're working with, you simply keep the blue ticks populated. Then when you're ready, you press "apply changes" and the system will automatically inject the ISWC or works information into the master and release recordings that you have selected.

This concludes our overview of our working

user interface. For more information, please visit DotBlockchainMedia.com.

(Video concluded.)

MR. UMEZAKI: So there's a fair amount of technology behind being able to have that user experience. And just a few key takeaways that I think hopefully either sort of triggered in your mind or perhaps things to think about as we have our discussion. First is sort of horizontal matching across works and recordings. This is very, very important that we get right in the digital age, as we've already talked about.

Permission to access, the notion of separating data between what's publicly available and what is permission from the owner to others that are relevant, sort of kind of a need to know, if you will, setup is included there.

Aligning ownership and data with each other. That's not always the case in some of the standard formats that we use today in the music business.

Multiparty collaboration, the ability for multiple parties to contribute to the truth in a songspecific or even field-specific way, amending the data as opposed to erasing it or deleting it. We can start to create an ownership provenance trail if you think for others, but so far, technology in the music industry has not been able to ensure his songwriting and performance rights are actually permanently attached to his songs when they start traveling through the digital world. Simply put, that means he can't be sure he's getting paid correctly for the art he creates and shares.

In October 2017, we registered STOLAR's track, "Forget and Feel," onto the blockchain, watermarked it and delivered it to online stores everywhere. This is a demonstration of how we did it. We start by bundling up information about who owns the song and who should be paid with the audio file itself. We then record or stamp this information into a permanent storage compartment called a block. Information cannot be erased using this method, so each change to the data gets stored in a new block and linked together in a chain, creating -- you guessed it -- a permissioned blockchain of the history of a song's data that can never be halved.

Once the data is stamped onto the chain, a unique Dot BC URL is generated, and we watermark that URL into the audio file before delivery to online platforms. Why watermark, did you ask? Well, if STOLAR's song is later used behind user-generated

about what this is, and that's really the power of the block chain as far as we're concerned.

And then, lastly, the use of algorithms. We partner with a company called Exactuals, which has an algorithmic metadata cleansing service called RAI. It's integrated into our service. We think the machine can actually do a lot of the heavy lifting and first filtering and act as, if you will, an investigative journalist as it relates to identifying and figuring out what the correct data should be.

So that's a publisher and perhaps a label perspective. I wanted to also give you an example of how an artist might be able to use this, so this will be the next video. Oh, sorry, interoperable with existing standards and also leveraging existing identifiers. As opposed to starting radically with something different, the whole idea behind this process is our solution is to leverage these existing, if you will, norms within the industry. So for an artist.

VIDEO: It would be nice to think every song in our digital world correctly credited songwriters and performers. But until now, this simply hasn't been the case. Meet STOLAR. He's a professional songwriter and performer that writes for himself and

content online without a credit, a link to his writing credits are still present in the song itself, simply by listening to the song's watermark with a special app.

Here's a live example of how that watermark identification process works. So I'll start by playing the song and using a watermark-recognition app to listen. And if I click on the image associated with the song that comes up, we're led to the URL that we embedded, which contains the Dot Blockchain registration address. And the public-facing data here that we can see includes information that has been historically difficult for online platforms to collect, such as publisher, performing rights organization, or a writer IPI.

Finally at the bottom, if there are changes to the actual song, you'll see these in a version history of each new time-stamped blockchain registration. So the result is that these files will no longer be orphaned from their owners when they progress across the net. So now artists, songwriters, and other rights owners and users can forever have the most current and accurate data attached to their songs anywhere they appear online.

(Video concluded.)

MR. UMEZAKI: So, again, key takeaways from this one, comprehensive metadata that's immutably linked to the actual underlying file that we're trafficking in, which is the audio file; embedding identification and other assets, as well as indexing against other, if you will, important contributors, commercial parties, et cetera; managing changes and actually distributing those changes quickly and efficiently because it's linked to the audio file itself, so wherever it travels; and, then, dynamic data, if you will, which we think has applicability to many of the DSBs that we're working with currently.

So those are some of the key takeways. You know, our intent is to actually get the audio file or the media file more generally to be smarter, if you will, within the file itself so that we can actually transact at the speed of digital on the monetization side. Thank you very much.

(Applause.)

MS. ALLEN: Thank you very much, Ken.

So, next, I invite Rusty Turek, Founder and CEO of Pex to present his attribution engine.

Following his presentation, we'll have probably seven

minutes for coffee, and behind and then continue.

MR. TUREK: Hi. My name is Rusty Turek.

nothing. The abuse prevention that I spoke a little bit, all rights owners that are trying to register content with us have to have their identity verified prior. Working with us, the same goes to the opposite side.

And so if a new registration is done and there is a collision found, the exposed very comprehensive system to communicate between the prior rights holder that registered similar content, the new rights holder has four ways how to resolve this. They can withdraw their registration; they can challenge it; they can also accept it and create a derivative; or they can amend parts of their contents, for instance, if there is a snippet that they're holding out, our system will exclude that part. We'll attribute to the original rights holder and then carry on over it.

And so there is -- and the second part of the system is search. And so this is using our own proprietary algorithms, most of you probably never heard of Pex. We are a five-years-old company. We built the largest search engine for audiovisual content on the internet or in the world. We have now over 17 billion videos and songs indexed. We work with the major rights holders across the globe. We surface around 50 million new videos and songs

I'm here to present our newest product, which we call attribution engine. It's in the light of Article 13 and it's kind of trying to address that

So what is an attribution engine? Essentially, it's a complex database of rights with custom search capabilities. Custom search capabilities is what makes this a little bit more special than maybe other systems. And so the search is done by audiovisual content itself. So essentially it's identification based on unknown files that tracks back the rights information.

So there are two steps to the systems. The first one is asset registration. It's kind of three parts of this. And so there is a database to which someone can register their assets. The database is open to everyone. We built systems in place that allow us to deal with fraud or attempt to register incorrect information.

And so any audiovisual content can be introduced. We don't do images or stills, but everything from half-second up, that means animated GIFs, songs of any kind, podcasts or any kind of content. There is no length restriction.

The best part, I think, is that everyone can register it for free. No maintenance cost, no

1 uploaded to major social platforms a day.

And so we are using the same algorithms for each product, each, you know, a little different shape, but we are able to deal with major changes to the original content being cropped, compressed color changes, horizontally swap images, frames, change the angles and a lot of other things, sped up and slowed down. One of the most important parts of our algorithm is it allows us to identify content as short as a half-second, so that means we can take a meme and backtrack it back to the original source, like a movie or something similar. The same goes to music.

And, also, our system allows us to identify cover versions, mixes, and remixes and other -- or other derivatives. What is maybe most important about this system is all lookups are guaranteed to return within five seconds, which means if -- even if we have hundreds of millions of assets registered, all lookups will finish within five minutes. So you can think of this in the form of Shazam or something similar. It just surfaces rights information in the context of the rights holder.

Rights holders also have -- have a right or chance to expose their licensing information, which can be different for selected platforms and globally,

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73 1 so they can internally build -- let's call it a 2 compulsory license with us. And so whoever new --3 whatever new platform enters our system, they can get 4 this default license. And then if they decide that 5

they want -- they want to negotiate the terms, they can go and the platform -- the rights holder can amend that. But the best part about the system is all platforms and DSPs are using this, again for free.

And so maybe you are thinking about a business model of ours. We have two ways how to -how we make money on this. One we take a small percentage of transaction costs. That means if the content is monetized by the platform, we take a small percentage from the platform. And, then, additionally, another thing is data because we collect all the data from all of the lookups and additionally we are getting anonymized usage data from the platforms. We're able to build complex charts, bundles, and everything around it. So that's all.

(Applause.)

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MS. ALLEN: Thank you. And just one quick tip. Rusty did present last year, just on Pex. So if you go to digital marketplace second public meeting, there is a video with a demo of just the Pex search engine.

IDENTIFICATION

MS. ALLEN: If we could slowly make our way to our seats, we'll get ready for the next session on identification.

So welcome back from coffee break. If people could please be seated, we'll get started with the next round and the next topic of identification.

We will have a series of presentations from the panelists who will then go into a discussion of identification. This year, when we were discussing the agenda with people, there was really -- in the past, we've talked about identification of the content, identification of the rights management as all part of the conversation.

This year, there seemed to be a need to focus on identifying the people, so we're doing a bit of a deeper dive. And I, you know, give thanks to Bill Colitre, who will be moderating the panel discussion for coming up with the topic and really forming this session.

First, we'll have Paul Jessop provide an overview of standards initiatives. He's the Founder and Director of County Analytics, an independent consulting firm. He's asked me not to get -- have a short bio because he will introduce himself.

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It's time for a coffee break and just networking. So, please, if you want to get up, the restrooms are on the right in the back, and we will resume, say, in 10 minutes, at 10 minutes to 11:00. Thank you.

(Brief recess.)

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After him, we will have Michael Healy, the Executive Director at the Copyright Clearance Center who's based in New York City. Before moving to the United States in 2006, Michael worked for more than 20 years in the publishing industry in the UK. He's been Chairman of the International ISBN Agency, a Director of the International DOI Foundation, and led the International ISO Committee that developed ISBN 13. He currently chairs the International Standard Name Identifier (ISNI) Agency and is the Director of the UK Copyright Hub.

Greg Cram is the Associate Director of Copyright and Information Policy at the New York Public Library. Greg endeavors to make the library's collections broadly available to researchers and the public. He is responsible for developing and implementing policies and practices around the use of the library's collections, both online and in the library's physical spaces.

And, finally, Bill Colitre is the Vice President and General Counsel of Music Reports. In this role, he serves as counsel to Music Reports, strategic consultant to its clients, and head of the company's Licensing and Royalties Services Division.

So, first, Paul. Thank you.

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MR. JESSOP: Good morning, everybody. I'm Paul Jessop from County Analytics, and for my sins, which are manifold, I work extensively on media identifiers. So I do some work for the RIAA on ISRC, the International Standard Recording Code, for the DOI Foundation on DOI, which incidently underlies a lot of the growth in movie and TV that we were seeing for MPA earlier.

And for fun, I work with Michael on ISNI on the international standard link identifier, and for the Music Business Association, where I'm an amateur musicologist. And I hope you all saw the announcement of the induction into the National Recording Registry, and I evangelized there for the Cassall's Cello Suites and the Benjamin Britten War Requiem. If you don't know those recordings, I commend them to you.

Thanks to RIAA. They work me hard, but they do allow me to go around the world evangelizing this stuff, even when I say things they don't necessarily like. So anything I say today is to be attributed to me, and I'll take the blame.

So what are we trying to do here? We're talking about attribution, and I believe my friend, Peter Jenner, will talk later about some of the reasons we want to do attribution. So let's just deal

how fine-grained do you need to identify, when can you decide it's not worth going any further. We can regard these two things as being the same.

Governance, who actually looks after systems, who makes -- takes decisions, who runs appeals. Sustainability. Are these things actually viable financially to be managed into the future? We used a very interesting standard called the International Standard Text Code, which ran out of money and it's no longer being operated. We're trying to reboot that. It needs to be sustainable to be useful to the industry. It needs to be persistent. You need to be able to be sure that tomorrow the code will be the same as it was today if it's the same thing and somebody hasn't arbitrarily changed it. And these things need to be actionable. You need to look them up. You need to be able to access through API's computer systems that will tell you what it is you're dealing with.

So how do these things get standardized? That was -- and why do we do that? That's what I was asked to talk about. Well, standards generate trust and they generate smaller barriers to entry, and they generally encourage people to make things that work. And where do they get standardized? Well, they get

with it as a function we need to achieve. And knowing who is or what is something is fine and dandy. And if we can trust in that knowledge, that's even better.

But really, in 2019, we need to delegate that trust to machines, and machines don't deal well with text strings, just trying to match against a Rachmaninoff in its various transliterations and different fonts is nigh on impossible. You need a code, you need a number.

When Axl Rose covered Bob Dylan and Guns and Roses recorded "Knockin' on Heaven's Door," various people produced what were apparently not incorrect renderings of that, and I'm told there are 125 different versions with different capitalizations, different truncations, and different apostrophizations in there, but hopefully just one code that identifies that so it can be pinned down accurately.

Smarter people than me have laid down a conceptual framework for this. Mark Bide and Godfrey Rust I'd call out. I think Mark Bide spoke to an earlier instance of this meeting. And it was now nearly 20 years ago they produced the INDECS report, which still underlies much of our thinking on this. And they articulated a series of requirements for identification systems that talked about granularity,

standardized internationally through organizations like ISO and IEC, which sound very grand, but they're just really private clubs in Geneva of national standard bodies.

Then there are consortia like the World Wide Web Consortium -- W3C -- industries themselves run standards. So the recording industry runs GRID, which we saw on a slide earlier. And then there are sectors within those industries that run their own identification systems like IPI for people in the creative sector -- songwriters and artists and so on.

So I suppose a personal view on how these standards work best is that the broader the basis the better. Standards which have a foundation across a number of different aspects of one sector tend to fulfill the needs of the whole sector, and that makes them more viable. National solutions are part of the problem, they're not part of the solution. Copyright may be a national system of legislation, but these marketplaces are global, and the systems need to spread across those borders.

Beware the enclosure of the commons. We're starting to see people using international standards to place restrictions on what people can do with that data. I think that will end badly. And open data

drives new functions, new applications, and new applications and new functions hopefully creates value for both consumers and for creators. And I think that's what we should be aiming for and what I hope we will be discussing later in the panel session.

MR. HEALY: Good morning, everyone. I'd like to thank Susan and her colleagues for the opportunity to be here again. I am here today not as Copyright Clearance Center but in my moonlighting role as Chairman of the International Agency for ISNI. I'm going to do a really quick gallop at a very basic level through what ISNI is in the hope that those of you who want to dive more deeply will be able to do so either going to some individuals I name at the end of my short presentation or to the ISNI website to learn more.

So ISNI, the basics. It's an ISO standard that was initially developed in 2012. I was part of the original ISO working group that developed the standard back in 2012, and it has recently been reconfirmed as these things have to be by ISO every five years, most recently for us in 2017. The International Standard Name Identifier really is exactly what it says on the can. It offers persistent, unique identifiers for public identities.

YouTube adopted the standard for its platform.

So today, we have about -- in excess of 10 million identities with ISNI, about 9.5 million of those, I think, are probably individual entities, and then about 8-, 900,000, if I have my numbers right, and my numbers are up-to-date, I hope, or identifiers of organizations.

In terms of governance, the international agency that I am chair of, very much on a part-time basis, is the formal governance authority which every standard of this kind must have according to ISO. And we are responsible for the rules of the road, so to speak, and maintaining an efficient and effective standard for ISNI.

It may be of interest, particularly to this audience, to see that, you know, collective management organizations particularly were very prominent in the early stages of ISNI and were founding members. So you see names you'll be familiar with there -- CISAC and the Conference of European National Libraries, and IFRRO, which obviously Copyright Clearance Center is a member of.

And so you have a top-level governance agency, and then underneath it, the real work, so to speak, is done by a network of nonexclusive

So John Lennon, Ringo Starr, the Beatles collectively, plus fictional identities -- Superman, et cetera.

It is currently used to disambiguate and uniquely identify a whole range of individuals and organizational entities, particularly in the creative supply chain of value chain, including performers, writers, artists, and so on. It is -- it has become fairly well established, I think it's fair to say, in recent years.

When I became Chairman of the International Agency, which I think is a little under three years ago now, the primary application and adoption of ISNI was in library settings. It was considered particularly useful in national bibliographies and in library catalogs as a way of disambiguating similar names, so, you know, the Mao tse Tung, Mao Zedong problem, the variant spellings of Dostoyevsky and so on.

So its initial adoption was in a national library, national bibliography setting. And one of the things I was keen to do with friends of the standard and colleagues like Paul was to see if we could break out of the bibliography ghetto. And I think we've had some success doing that. And perhaps the biggest breakthrough was about 14 months ago when

registration agencies. And these, again, betraying the background and where ISNI was first adopted, these include a lot of national libraries, Bibliotheque nationale de France, the British Library, and many others around the world.

And, then, increasingly we see growing interest from and adoption of ISNI amongst collective management organizations. Delighted that SoundExchange recently came aboard as a registration agency. They are one of our newest, and they, I think, reflect this new direction, if you like, this new direction of travel for ISNI, which is particularly strong in the music sphere.

And as I said a moment ago, I think the adoption back in January 2018 by YouTube represented a significant breakthrough there. And the underpinning, the underlying technology provided by one of the founding members -- OCLC -- based particularly in this case in the Netherlands.

The business model is straightforward, I think it's fair to say. It's supported by membership and registration agency assignment fees. There are setup and transactional charges for ISNI assignment. As Paul was saying in his introductory remarks, the goal here is to get the widest possible market for

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this while maintaining, you know, its nonprofit status and the lowest possible barriers to adoption.

In terms of further information sources after this, if you're interested in knowing more, you're best going to Tim Davenport, who is the managing agent for ISNI. He works at an organization called EDItEUR, which we contracted with to provide secretariat services and support for ISNI. His details are on the screen there, and mine at copyright.com if you want to get in touch with me, too, and ISNI.org is the canonical source for all the information you need about ISNI if you want to read up a bit more about it.

So I'll stop at that point and hand over to Greg. Thank you very much indeed.

MR. CRAM: Well, we're spending a lot of time talking about works that are new or recently created. There are hundreds of millions of works that are not new or recently created, and that's where NYPL comes in. Many of these were never released commercially, or if they were, they haven't found commercial markets today.

NYPL is both a consumer and producer of works protected by copyright, and my team reviews all of the works that we digitize at NYPL. The works that

1 the time.

You can use this interface to search for photographers. You can filter on a number of facets, including nationality, gender, the process that the photographers used. So if you're interested in cyanotypes and not other types, you can filter on those, roles, locations, and other kinds of results.

Here, I filtered or I searched for Berenice Abbott, and I can go to her page, and the page tells us a lot about Berenice Abbott. It tells us the locations she's associated with; it tells us where her photographs are located within which collections across the world; and it also gives you a list of sources that we used to create the data that we're using.

This sounds a lot like link data, and that's because it is. We link out to a number of name authority files like VIAF, YouLand, Wikidata, and in some cases, though, we are the only source of information about that photographer, at least that only source online. And so our data yet is not published in the semantic web, RDF triples, but we'll get there soon. It's on the roadmap because we think it's important to be able to share those identities in a national or international sphere.

are older, longer-tail works, are the ones that we spend the most time researching, and to make this research a little bit easier, the library has undertaken a number of projects. I have five minutes to tell you about two of those projects, so I'll run through this pretty quickly.

The first project is the Photographers' Identities Catalog, or here on out, PIC. It was -- let me introduce you to David Lowe, whose birthday is tomorrow and I think is watching right now -- hi, David. He works in our photography division, and in 2003, he began collecting, aggregating, cleaning, and researching photographers and photography studios. He used a variety of sources of data, and he built out a spreadsheet that tracked all of these photographers. But knowing NYPL, our goal was not merely to have a single spreadsheet which doesn't work at scale. We ended up putting a front end onto that database, and that's the Photographers' Identities Catalog or PIC.

So we took that data. We created an experimental access portal, and the data contains a variety of things. It contains names, nationalities, dates of operation, locations, and other things to help us and help researchers find rights holders, or at least find the photographers who took the photos at

That's project one. I've got two and a half minutes to get through project two, the Copyright Office records.

So NYPL is really interested in the records that are embedded in the Copyright Office not that far away from here, and those records are a record of American creativity. It's one of the best records we have of American creativity, but they're locked away in a set of paper records that are difficult to search and require a really high level of expertise to use.

Many in this room know how to use it, but most folks outside of this bubble don't quite understand how they work. These records document a significant part of the literary, music, artistic, and scientific production of the United States from 1870 to 1977.

One of the forms that these records take is the card catalog, and the Copyright Office just made all of the cards available online through the virtual card catalog -- yea! Finally, I don't have to come to DC every time we want to look up a card catalog. But the other way that we search records and the way the kinds of records that we're focused on right now are those that are in the catalog of copyright entries or the other set of finding aids to the actual Copyright

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Office records. These records from the CCEs were published about every six months. Many libraries have these in microfilm, and the Copyright Office a few years ago, in cooperation with Internet Archive, imaged them, but they're just images.

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So here's the problem. We need to transcribe and parse these records. We need to transcribe them, which means taking the image of the record -- looks like that -- and convert it into machine-readable text. So this is the entry for the Hardy Boys, "The Mystery of the Flying Express," and we need to transcribe that data so it's accurate. And I'm not talking 98 percent accurate; I'm saying 99.9 percent accurate so that we can rely on the transcription.

But that transcription only tells us what the text is. It doesn't tell us what the text actually means. It doesn't tell us the thing -- the identities. So the next step is to parse out that data. We need to break out that data to break it into its constituent parts so that we can facet on that data.

So back to our Hardy Boys reference. This record is just a blob of text until you start to parse it out. And once you start to parse it out, you can

result that looks something like this.

This is all of the information within the Copyright Office about this work, and because you are all power users, you might want to actually go see the underlying records that relate to that work. So maybe you want to see the registration record, the renewal record. Maybe you want to look at the card catalog record. Heck, maybe you want to look at the recorded documents, the assignment that happens to that work later in time.

We want to build a database that does all of these things and exposes all of those records, but having a simple database of free text fields is insufficient. It's not going to get us where we need to go. I need to turn these things blue. So I need the name, the author, Franklin W. Dixon. I need to convert that into a unique identifier or associate it with an identifier to make these records actually more usable than they are today.

Even better, what I would love to be able to do is stick a thumbnail of the object if it's a twodimensional work or if it's some work that I can put a visual representation on, I would love to be able to associate that record from the Copyright Office with the actual object. And I think I'll be able to do

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pull things out like the place of publication, the publisher, and start to define those records in ways that make it more amenable to searching. The problem, though -- one of the problems that we've encountered in doing this work is the problem of unique identifiers. How many of you believe that the registration numbers the Copyright Office assigns are unique? Good, don't raise your hand because they aren't.

Here is a record. These are two different records within the same volume of the CCE that share the exact same registration number but are definitely two separate works. This happens to be a typo in the CCE fixed leader in the renewal records, but the Copyright Office did review registration records over time. So while we'd love to hang things off of a single number, that's impossible because I know that number is not unique.

So what I would like to do, we're working towards, is creating a searchable interface for the CCEs. We want to have a search interface that looks sort of like this. This is my mockup I did about five minutes ago as we were starting to talk about this, and, for example, if you search for the Flying Express Dixon, you should be able to search -- get a search

that because the Copyright Office -- the deposits that go to the Copyright Office, some of them end up in the Library of Congress, which I think I might be able to associate.

Aah, but I have a long and big mountain to climb. There are 450,000 pages of CCEs. We've done 40,000, so I am almost at 10 percent. I've got a long way to go on this, and we need to build out the front end of the database, but our goal is to convert these records to make them more usable and to start to feed them into these other identifiers and other entities. other ecosystems so that we can start to be able to track some of the information we have about older works.

So access to this data will help us identify rights holders and works. It makes -- we want to make our data available and open for use and reuse without restriction to help add to and contribute to the web of identifiers that exist. We want to use this data to make it easier to identify works, to identify rights holders and authors so that we can, A, give them proper credit, but, B, seek licenses from them should we need a license. Thank you.

(Applause.)

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PANEL DISCUSSION: THE AGE OF ATTRIBUTION MR. COLITRE: Thanks a lot, Greg. So from a constitutional perspective, we seek to encourage the further development of creative works and original expression by securing for limited times to authors monopoly rights over their intellectual property. And from a creator-centric perspective, then, this becomes a key feature, how do I identify the creators and authors that we're trying to incentivize to the system so that we can create a web of relationships around their works in relation to or agreements about those

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So I think your last hypothetical there was a very interesting example, how do you turn the name Dixon blue so that it can be linked through to all the other assets to which Dixon is associated for the purpose of identifying for society in general these are the things that are under protection, they must be licensed, and then you can seek various systems for doing that.

works that allow them to enjoy the monopoly that

society has given them.

These are the things that might be in the public domain and therefore are free for use or to which exceptions apply, such that the New York Public Library can do the things that it needs to do to

sit on foundations that are earlier than them, and certainly ISNI works to the extent that it works in the value chains I'm describing because it is -- it works interoperably with the ISBN and the ISSN and the DOI, et cetera.

These have to be seen not as standalone identifiers but individual identifiers that work within a network of related identities, it seems to me. So we still are in a far-from-optimal situation. There are multiple forms of individual identities --ISNI, ORCID, and many others. And this is not a case where one is going to dominate, I don't think. I think we are not going to see one displace all the others. That's not going to happen. That's just not the way the world works. So the interoperation of these unique identifiers is the critical piece in all of this, it seems to me.

MR. COLITRE: So you referred to the role of ISNI in relation to other identifiers of works, but they also interoperate with other forms of identifiers for persons and entities, for example, PIC, correct? Is there yet a lookup table between the PIC catalog and ISNI, or will there be in the future?

MR. HEALY: There isn't right now. Will there be? I hope so, but that -- I think you've put

preserve those works, for example.

So I wanted to start by asking, you know, Michael, ISNI has arrived as an international standard that exists across domains, but there have been other domain-specific identifiers throughout time. Some of them still persist to this day. To what extent do they interoperate? Does ISNI supersede them all? Where do we go from here with unique identifiers for persons and entities?

MR. HEALY: It's a very tough question to answer and a simple one to ask, I think. Certainly, ISNI itself, the ISNI community, those of us involved in it, see ISNI as a sort of bridge identifier and connecting to other forms of persistent identifiers in the value chain. So, you know, we have this situation where we've had a standard number for books since the late 1960s, first standardized in '72, and that very forward-thinking piece of standardization has enabled, I would say, decades later of things -- of initiatives that have facilitated a dynamic value chain for books.

So ONYX, the standardized communication protocol for bibliographic information in the value chain, really could not operate without the ISBN. And this is something Paul was referring to earlier when you refer to the INDECS model. So many of these things

your finger on the key thing, is there so many of these and these crosswalks need to be created --

MR. COLITRE: Because they have different functions, right?

MR. HEALY: They do indeed.

MR. COLITRE: ISNI perhaps becomes a web that connects different silos of information, but the PIC database contains all kinds of information about the photographer that ISNI has no intention of ever collating, right?

MR. HEALY: Right. I think there's going to be an interesting conversation over lunch about this. Clearly, the work that the New York Public Library has done has established these identities. It's solid, it's robust, it's believable, it's trustworthy, which is exactly the basis you want to import that data into ISNI. Now, some of those characters will already be there because they've been cataloged in libraries or they've been picked up in other systems, and they won't have a new one assigned. They'll be mapped to their old one, and by doing that, that system as a whole gets bigger and better and more useful and everyone wins, if you can find the money to do it.

MR. CRAM: Yeah, and from our standpoint, the more we can connect identifiers to other

identifiers, the better it is. The more we can build out that web of connections and those crosswalks, the better we all are.

MR. COLITRE: So let's move to the assignment of these. In the context of PIC, the libraries are seeking identification on behalf of authors who may even be deceased, but if you are a living creator and you wish to be identified, how can you acquire, for example, an ISNI identifier or an IPI? What are the steps you have to go through? What's the timeline to achieve it, and what costs are involved? Anyone?

MR. CRAM: So I can tell you how you enter PIC. So PIC, you can't just apply to join PIC. It's not open in that way. If you have an identifier that's in Wikidata or your collection appears in a public institution, then you will be added to PIC, but otherwise, the database gets too large for us to manage and it becomes less useful for our patrons. And that's where we get into fit for purpose versus interoperability, right?

We're building this thing to identify rights -- identify photographers within the collections of libraries. It's an identifier. It still tells you something about that object but exploding that thing

25 bucks, I think, for the privilege. That's not sustainable, it's not scalable.

We'll soon see the British Library come on board with a portal for UK music creators, where they will arrange the interface between the individual and the system, and that will be more scalable and presumably lower cost. And there will be many more people -- well, many more entities will pick up updating the record during a performer or a songwriter's life.

It's not intended to be a discography, but if somebody goes in and gets an ISNI in the early stages of their career and then has a big hit later, it will be kind of odd if that hit isn't the more realized in that record because we won't be able use it to verify the attribution, so there will need to be an update or a refreshing of the process, and people will do that, hopefully automatically in many cases, so it won't require a lot of personal input, but management for artist management and indeed songwriter managers will have a role in checking that their charges have got their data in order and looked after.

MR. COLITRE: So you -- Paul raised the question of sustainability. Are we dependent on institutions like the public libraries to fund the

to include every single person who has taken a photo in the last week would explode just the database.

MR. COLITRE: Well, while we're talking about that method, is there a method for prioritization when the institution is assigning these identifiers as opposed to when the person is coming forward and seeking identification? I mean, you have untold millions of records to go through, how do you organize the work?

MR. CRAM: So we prioritize -- I think we're prioritizing mostly the items that are in the collection that are mostly used, or the items -- the photographers that we can identify. So if I have a name, I can put that into PIC. If I can develop more information about it, great. I've got a fuller and more complete PIC record. But a lot of it is based off the catalog data, so if it's in the catalog, it'll get into PIC.

MR. JESSOP: I mean, I think ISNI is moving from a history which was in data mining to a future which is in registration. And that's happening, like, today. So most of the records in there to date have been pulled out of other systems. I think that today there is only one agency to whom you can go and say I'd like an ISNI, please, and they'll relieve you of

registration and management of these databases over time?

MR. JESSOP: I don't think we're dependent upon them. I think we're very glad that they've taken an early role. They've kickstarted things, and they've used their resources wisely in that way. The British Library -- you'll detect I'm not from around here -- so I have a close connection with them. They got a slug of money from the National Lottery to do work related to music identities and music preservation, and that was a good thing.

As we move on, the numbers get very small. The wholesale price for assigning these things is tiny, and if it's done at scale, then it sort of disappears into the noise.

MR. COLITRE: Well, let me test that idea for a second. The cost is tiny on an individual basis, but there's some work that goes into these registrations. You mentioned the use of cataloged notable works for purposes of disambiguation among authors, right?

A big hit is known to be associated with someone, that's an anchor piece of data that we can use to disambiguate that person with someone else, but it takes some professional with a reputation to

identify that, log it in the ISNI database in order for that to happen. That takes time, expertise. What is the cost of operating these organizations, and is the cost correlated with the verifiability, the reliability of the data?

MR. JESSOP: I think a lot of this will happen not in that way but it will happen through artificial intelligence engines crawling over the data, and I think I'm certainly a little worried that that's done too early and in too crude a way, but that's why it's so exciting to see SoundExchange coming onboard. They know who the creators are because the checks they write them clear, so they actually exist. They also know what they've been involved in creating, and they can use that data to refresh the record.

I'm not saying it's happening yet, but they have the data and the capability, and I think it's only in the extreme cases where that fails that you'll need manual intervention to polish the record, to create -- to resolve problems.

The day before my late father-in-law's funeral, we found his ISNI record was slightly corrupted and it had become merged with somebody else, and the folks at the British Library sorted that out

place, it found its sustainability because of its position in a much longer value chain where the individual cost of an ISBN was more than met downstream by the tremendous value in an automated book supply chain, and that made it sustainable forever thereafter. That's the challenge I think we face with all of these identifiers.

MR. COLITRE: That's a great opportunity to ask a question of Greg. You know, my own organization, Music Reports, maintains a large database of music rights and related business information, and we are able to sustain the cost of that massive database with seven terrabytes of churn a week because we have a business administering music licenses on behalf of a wide range of clients. And so it makes sense, it makes commercial sense for us to do that.

But, Greg, you have the problem of dealing with books that are technically in copyright but out of print, which suggests that their commercial value is, you know, not necessarily sufficient to sustain a commercial market for it. So how do you deal with that?

MR. CRAM: Yeah, so the president and CEO of the New York Public Library came to us about a year or

quickly, and they're part of what they call the quality team. It's not scalable. It's individuals. It's skilled librarian catalogers working on this stuff, but that needs to be only the extreme cases that get that as a last resort.

MR. HEALY: And your question about sustainability, it seems to me to be one of the key ones because in his opening remarks Paul referred to the international standard text code, the fact that it is dormant, moribund, and may, in fact, expire entirely because it's been difficult, impossible to find a community or an individual organization that can really identify a true value for it.

When we created it, back in the early 2000s, we assumed that there would be, you know, downstream value to link manifestations of a book back to a textual work number. But for that to sustain itself, there has to be a business model to underpin it, and there hasn't been one. ISBN that I referred to earlier relied, at least in the UK, for 30 years on the generosity of a particular individual in the UK supply chain. He funded it from his own pocket largely, and from '69 to '99 ISBNs were free to everyone.

That was not sustainable, but it found its

two ago, maybe three now, and said I have a vision for the world. The vision is to make every book ever published available to anyone anywhere at any time digitally for free to them. Now go forth and do it. So we've tried to break this up into more manageable chunks. The public domain in the US is easy. If I know it was published before 1924, public domain, great. Now it's just a cost of digitization, I know how to deal with that.

Books that are published today that are commercially released as e-books and available to us as a library to purchase licenses, great, easy, I can deal with that. That's just money. The problem is the stuff in the middle. What do I do about books that are in copyright but out of print, no longer --haven't found a commercial market to exploit right now. How do we deal with those?

So we've been prioritizing books that our patrons are asking for. We're using basically circulation counts to figure out which books are at the top of the priority list and then go out and try to find the rights holders of those works. We're working with the Authors Guild to help us do some of that work, but the problem that we keep running up against is the same problem that Ken mentioned

Developing the Digital Marketplace for Copyrighted Works

earlier, who owns the right? Is it the publisher, or is it the author? And if you ask them, neither will tell you an answer because neither really know.

Some rights revert, and sometimes that reversion must happen affirmatively. The writer must say to the publisher, I want my rights back, you haven't sold the book in X number of years, but asking people to go back and pull contracts is a problem. And even when you offer them a fully clean e-book, an EPUB that they can go take to market and, oh, by the way, we'll build them the connection into Amazon and eBay or Amazon and Google and Apple, we'll build that pathway for them, it's still difficult for them to go pull the contracts.

So identifiers are important, but the relation between the identifiers and the rights holder, or as the rights holder, is also really important for us.

MR. HEALY: And, of course, designations like "out of print" sound so quaint today. When I was running bibliographic agencies in the UK in the dim and dark past, you know, there was a standard availability code in print and a standard availability code out of print. And the move from IP to OP triggered, in many cases, a reversion to the author of

of your contract, many of them have put it in a file that is no longer accessible.

It's a quaint way of saying they've lost it, but that is a problem, and we need to figure out a way to better resolve the conflicts between the publishers and the authors but also give the authors or the rights holders, in either case, the ability to stand up and say, that is ours and we would like to associate whatever the unique identifier is that you've now generated for the EPUB to our files so that we now can have a contract that's relevant to that work and identifies that work.

MR. COLITRE: And, of course, that problem is exponentially multiplied in collaborative work forms like music, for example, where now you've got four composers and three performers arguing over their various contracts with various publishers and labels, all to, you know, get a single product to market, right?

MR. CRAM: Yeah, and we haven't even talked about inserts, right? The magic world of inserts where I've got third-party works in a book and I've got 50, 60 of them. Now I've got 60 rights holders who have rights in the physical manifestation of the book, and now how to associate those in -- it just

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those rights.

Publishers -- trade publishers got smart.

They abandoned the use of OP and they introduced with technology like print on demand a new code -- manufactured on demand, which prevented the reversion effectively. You know, it didn't trigger the reversion. So many of these terms and designations have changed in the fluid, making, you know, Greg's challenge even bigger than it sounds.

MR. COLITRE: So, Greg, part of your challenge goes to agreements about the works that you are looking to these individuals to own up to. To what extent are creators and authors given access to these systems to be able to manage their records, to tie agreements, to tie works to their own repertoire, to edit their own profiles?

MR. CRAM: We would love for them to be able to do that. We would love to be able to build a platform for them to be able to reclaim works and say the library -- we know the library's interested in digitizing this work. It's looking for the rights holder to come forward and claim it. Trying -- we're building that system today, but adding all of that data into the system is hard. It's a lot of labor, and asking -- if you ask authors, do you have a copy

screams for a relational data that says this person is a rights holder in this object that appears in this book.

MR. COLITRE: Now, when it comes to this question of authors being given access to affect these records, then there's a set of questions that come out of that. How do you maintain the integrity of the records? Do you now have an obligation in light of the GDPR to give them that access, including the right to remove records? And what does that do for the rest of us in society who have to keep track of these works that we are bound by law to respect from a perspective of intellectual property?

MR. CRAM: I'm going to punt on GDPR to our friend, Paul.

MR. COLITRE: Don't worry. He's British. He's not affected.

(Laughter.)

MR. JESSOP: Yeah, hang on. So can I just check on that?

(Laughter.)

MR. JESSOP: That was today's Brexit joke. I think this is a difficult problem but it's

a solvable one. If it's not solvable, we don't have a future in libraries because that's what librarians do,

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they catalog stuff, and that has been regarded as unexceptionable since we burned down the instance in Alexandria. And, you know, we're saying -- sorry, the other Alexandria. God, I'll have Homeland Security on me if I start talking like that.

Yes, we have to be respectful, but on the whole, this kind of factual attribution doesn't fall as foul of GDPR as people might at first suspect. That's the legal analysis that we've had done in all of the organizations that I work with. You can do these things, you just have to do it right. It's not an absolute bar.

MR. COLITRE: And if you could elaborate a little more, what are some of the things that a library can do to ensure compliance that square with --

MR. JESSOP: I think that's for the librarian.

MR. CRAM: Okay, so, yeah, GDPR is going to present some issues for us, but there are a lot of factual things that probably are certainly amendable, right? Someone under GDPR has the right to amend their record, and I think that's something that we would be willing to talk about, right, have a conversation about whether that amendment is truthful

MR. COLITRE: And yet again with compound works or collaborative works, one finds that there's often opportunity for disagreement among sources who would appear to be authoritative but who must, nevertheless, resolve their claims.

MR. JESSOP: Who have a strong commercial interest in reducing the number of people they have to share nicely with. And this is actually driving one of the timing issues in music at the moment, the music work doesn't get identified until all the songwriters have agreed amongst themselves who they all are, which in practice means agreed to shares, because if the shares don't add up to 100, somebody can pop out of the woodwork. That can mean that particularly in the case of urban music you don't get an identifier for up to 18 months after the song was written, and it may by that time have come, gone, been forgotten about, and people still don't have a number for it to manage its rights.

MR. COLITRE: And, of course, by that time also the 15 writers have been joined by 5 others who have claims adding up to 150 percent of the ownership.

MR. JESSOP: Absolutely. And then it all goes into some holding account and no money gets distributed until heads get banged together.

or not.

But libraries have been doing this for a long time. We've been responding to requests to change records, to modify records. The publication date of 2012 from Alexa raises some problems, right, and we should fix that record, and so we did, right? So I think that GDPR presents problems, but they aren't unique problems. They're problems that we've dealt with over time, and it's just a new flavor of the same thing.

MR. JESSOP: I agree with that. And we needed every stage to be recording attribution of data assertion, and that's not something we've historically been very good at, and that's something that our friend from Dot Blockchain was talking about this morning in a sense, the ability to make a change, to preserve the old version so you can roll back if necessary.

And that has to be coupled with the ability to judge the trustworthiness of the data based on its attribution. If I say X wrote Y, you may think well, what does Paul know. But if somebody who is the author or the publisher says it, it's got a much stronger chance of being correct and should be taken more seriously.

MR. COLITRE: Are there any questions from the floor? Mr. Griffin?

MR. GRIFFIN: Yeah, the word I haven't heard is "Government." And now we just had a law passed --

MS. ALLEN: Do we need a mic?

MR. GRIFFIN: [Off microphone] which requires our government to build a user database (inaudible) interest in government doing the work. I hear you say many times the words "we must," et cetera, and then I lamentably hear that some standards just disappeared for lack of interest.

And so I ask you, what are the limits of government, both pro and con, in this area that you see because I respect all four of you so very much about this, but is government going to do it, or are we just going to continue to leave it to industry? Where's that headed?

MR. COLITRE: Oh, yeah, so the question is government, to what extent does the government take responsibility or is going to be able to help in this matter --

MR. GRIFFIN: And which government.
MR. COLITRE: -- and which government and hasn't there been a law recently passed in the United States that involves government in the association of

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rights regarding music.

I'll answer that last bit first. The Music Modernization Act calls for the creation of a new mechanical licensing collective in the United States, but it requires the formation of a nonprofit organization to build and manage that system, so it isn't precisely government doing the work; it's government directing the creation of a nonprofit according to an open public process and the, you know, authorization of that entity to do the work with the involvement of a variety of stakeholders. So that sort of avoids the question of which government, and it's specifically related to a single rights type in a single territory, so it's not clear that that's a total solution, but it certainly points in a given direction, doesn't it?

Other examples where government has become involved in photographic cataloging or name identifiers, of course, you know, a question that arises anytime you start talking about a registry of individuals, a registry of creators, a registry of the kind of people that in prior historical moments have been rounded up and shot, one has to ask the question, what government, how do you put safeguards around that, isn't that what the GDPR is sort of aimed at?

MR. JESSOP: And I'd add that there is an international angle on this. You're quite right, the Mechanical Licensing Consortium will only deal in the linking of US recording and US publishing rights, but that is underpinned by a factual linking between X writing Y, and that will be true in other countries, even if the rights holders are different. So the existence, the subsistence of a record within the MMA-sponsored MLC system will have implications outside the borders of the US, and I'm not sure that everyone is entirely clear how that's going to end up.

MR. COLITRE: Forgive me if I'm repeating what you just said, but it's also true that this law has extraterritorial effect because if you are, you know, a French composer working in Germany and your work is exploited in the United States, it is certainly going to affect you, your mechanical rights in the United States will be impacted --

MR. JESSOP: Yeah, that's also true. That's a different question about a French songwriter recording in Germany and the licensing of that work in those territories, people will look to the US database to find out what the US says is the attribution there.

MR. COLITRE: Any other questions?

Anyone want to take a stab at any of those?

MR. CRAM: So I'll take a shot at the older record. So government already built that database. It's called the Catalog of Copyright Entries or the card catalog, except that there's just no unique identifier associated with it. So what we would want is going forward a unique identifier associated with everyone who registers a copyrighted work. That is -that avoids some of, I think, the problems that Bill just raised, but it's still a list of people that the government is building. It's just a list of people who have affirmatively stood up and said please identify me, note who I am, and include me in your registration record.

MR. COLITRE: And I would just point out here that the US Government is almost unique in the world in having taken on that approach. The Berne Convention did away with formalities in most countries of the world and therefore, you know, with the intent of protecting authors against publishers is my understanding of the rationale for that rule in the first place, we are now in a situation where individual authors are left with no means to easily identify themselves to the world about the ownership of their works.

1 Yes, sir.

Mr. HASBROUCK: I appreciate very much, Bill, your asking in your first question for an author-centric perspective. If I may, from that author-centric perspective, the ultimate authority about who I am is myself. And the place where ISNI went wrong from the start and the reason many creators see it as a case study of a worst-case scenario of how not to do identifiers is that the source of most of the identifiers assigned was not the author and there's no requirement in the author's -- in the ISNI standard for verification or approval by the person to whom this identifier is being assigned based on third-party data.

So it's resulted in a garbage-in, garbageout kind of system because it didn't have that authorcentric perspective.

MR. COLITRE: Michael, would you like to respond to that?

MR. HEALY: Well, obviously delighted to say this, Edward. You represent the living author community, and long may that continue.

Mr. HASBROUCK: Allegedly. MR. HEALY: Did you say allegedly? Well, but, of course, ISNI is about far more

	117		119
1	than that living community, obviously. But, you know,	1	where to go, feel free to ask me or any of our staff
2	I think it is quite literally impossible to create	2	here. Thank you.
3	that verification process and model that you've	3	(Luncheon recess.)
4	described. And we can take that offline, and I'm sure	4	
5	we'll end up taking it it offline and disagreeing.	5	
6	But that's fine, too	6	
7	But I don't see how it could be done better	7	
8	than it is done except perhaps around the edges.	8	
9	That's my personal view.	9	
10	MR. JESSOP: Maybe I could just add to that.	10	
11	If somebody had created a database of questionable	11	
12	quality and immediately used it for distributing	12	
13	money, you'd be completely right. What actually	13	
14	happened was that somebody created a database from	14	
15	good records, you know, library. Well, I struggle to	15	
16	find errors when I go surfing the database, but I'll	16	
17	accept there are errors in there	17	
18	Mr. HASBROUCK: [Off microphone] I don't	18	
19 20	know a creator who's looking for (inaudible) who hasn't found obvious errors.	19 20	
21	AUDIENCE MEMBER: [Off microphone] Yeah, I	21	
22	agree on that.	22	
23	MR. JESSOP: The data that's in there is for	23	
24	disambiguation purposes. It's not intended to be	24	
25	exhaustive, but in any case, creators have been able	25	
	118		120
1	to look in there, take a decision as to what they	1	AFTERNOON SESSION
2	think is right, and if it's wrong, there's a big	2	US COPYRIGHT OFFICE MODERNIZATION
3	button they can press saying please fix it. And as I	3	MS. ALLEN: We will begin in about one
4	just said, that happens within hours rather than	4	minute. We will be listening to Robert Kasunic speak
5	months. Well, if it doesn't, I'd like to know the	5	about Copyright Office modernization. We are just
6	example because then somebody at the British Library	6	waiting for a few people to come in from lunch.
7	needs to get fired, and that's not going to happen, so	7	(Pause.) MS. ALLEN: So hello and welcome back from
8 9	let's find out what the problem there is.	8 9	
10	But the delay before money starts changing hands on most of those records has given people an	10	lunch. Our next presenter, Rob Kasunic, will provide us with an overview of the United States Copyright
11	opportunity to fix up the historical records if there	11	Office modernization efforts. Rob is Associate
12	are errors that have crept in because of the kind of	12	Register of Copyrights and Director of Registration
13	typographical problem that Greg was showing us	13	Policy at the United States Copyright Office.
14	earlier.	14	In his position, Rob heads the Office of
15	MR. COLITRE: I'm afraid we're out of time,	15	Registration Policy and Practice, which administers
16	but thank you. This has been a wonderful discussion.	16	the US Copyrights Registration System, and advises at
17	Look forward to talking to you afterwards.	17	the Register of Copyrights on questions of
18	(Applause.)	18	registration policy and related regulations and
19	Ms. ALLEN: Thank you all. So we are	19	interpretations of the copyright law. He is a
20	breaking now for lunch. We will return at 11:45 a.m.	20	recognized copyright expert and is one of four legal
21	For those who are at 12:45.	21	advisors to the Register.
22	So for those of us who are presenters, there	22	We are delighted to have him today.
23	is a lunch available next door in the room, and then	23	Welcome, Rob.
24	the rest, there are opportunities in the cafeteria or	24	(Applause.)
25	across the street. If you have any questions about	25	MR. KASUNIC: Thank you, Susan. Thank you
		1	

for having me today.

Well, good afternoon. I am going to ask you all to put on your seatbelts because I'm going to be flying through a number of slides to give you some more -- an overview of the things that are going on with respect to registration modernization.

Before I get to that, I should say that we are working on the Enterprise Copyright System. So registration modernization is only a part of what we'll be working on and have been working on. Modernization started with the recordation system, which was a purely paper-based system, and so that is -- work on that has been ongoing. We also are working on digitizing records. So the virtual card catalog is the first step in that direction, but work will be continuing with that, ultimately for the goal of putting all of the Copyright Office's information together in a much more fluid manner for the public.

But we have begun some of the early work with the registration system and have not started any development yet. So I think some people were concerned that they were worried this was going along too far without having had input. There's going to be lots of opportunities for input into this process and we've just really started that.

background code changes. And so what we worked on, at least in terms of replacement of this interface, is trying to move to a much more modern, web-friendly approach that we can leverage web norms, have a friendlier tone, provide a lot more help within the application itself. Because I think one thing we found over the years is no matter how much material that we publish for the public in terms of circulars or the compendium, that the one place where we have a

So I'm going to go through a number of slides showing you what some of these design concept features that we're thinking about adding and some of the other steps that we've been taking.

chance of really reaching and helping applicants is in

the application itself.

So one thing would be to -- right now, we send emails to people when there are questions about applications. For instance, in general, we receive well over 500,000 applications a year and about 30 to 31 percent of those applications require correspondence. Having an easier way to communicate with the public is one feature -- with applicants is something that we're striving to do. Having ways that you can set up how you want to be contacted with those notifications so that you can go into your account and

So we worked with a contractor, Deloitte
Digital, to look at the user experience side of the -the public-facing side of the registration
application. And in the course of that, holding
meetings in a number of cities, in Nashville, Los
Angeles, New York, DC, these interviews collected
information from people who were willing to meet with
us and say what they didn't like about the current
system, what they would like to see in a new system.
And so there were 68 interviews during those meetings.
There were also surveys and other information that was
collected.

And the result of these meetings was this wall that is in the registration program now, still up there, which collected and organized all of the notes that were taken in the course of those meetings. We also collected information from staff and others who participated and who had ideas about improving the system.

So where we are now is -- and have been since 2007 -- is this is the current design of the ecosystem and it is not -- as you can see, it's text heavy. It's not particularly user friendly. It's inflexible, which is a constant frustration with this. To make any changes to the system requires extensive

look at what the problems may be with that or what the progress.

If you can track your pizzas, we want people to be able to know where in the process their application is at any given point in time. So being able to get text messages that there is a new notification in the system or robocalls, whatever those features would be, we want to include that.

Also, a long-standing problem was that we've heard about is that various law firms or companies would like to have parent accounts and have subaccounts within that. So that's another feature we want to build into that system.

Having a much friendlier tone and helpful guidance throughout the application is a major concern that we are trying to address, having ways that you can communicate using sort of features -- various features that you might be able to use in your Amazon account or some other account. Anytime that you've listed a person's name and address, have that added into your account so that you can just use that the next time without having to retype all of that information in. Having ways to more easily provide deposits for works and whether that's a drag-and-drop feature or looking at other forms of providing

deposits, such as FTP, are also things that we're working with.

Currently, our upload feature is very limited and time-consuming. Having more flexibility in those upload features is something that we know applicants want, and from some of the usability testing, these are features that people really did like the ease of uploading files. And, also, having less to fill out, so the metadata in those files or the filenames could, in the first instance, propagate or populate the title fields so you wouldn't have to write that in. You would have the ability to change that if that was not the title you wanted to include in your application.

But many of the -- just adding many features, help text at different levels along the way because we have found that for -- we basically could break down applicants into two very broad categories, and those would be experienced users with the system and novice users with the system. We want to be able to serve both of those more efficiently. And having various levels of help right in the application that you can go deeper and deeper into, if you need that, maybe having various tools for things like work made for hire or publication questions to at least provide

Deloitte Digital to -- they also engaged in usability testing for us. So this was a total of 36 sessions that were conducted and they took a considerable amount of time. It was probably about an hour or two for each of them, where scenarios were provided to the user and then they were videoed and talked their way through the application. So they just spoke aloud and we could hear their thought process.

And I can't show any of that. I don't think the people who were thinking aloud would like that. We do have -- I have a picture here. And that's our now permanent Register of Copyrights, Karen Temple, in the right corner, who did some usability testing as well.

We really learned a great deal from this.

One thing that we learned is that Deloitte Digital was a little bit overly optimistic about what they could accomplish and how they could help users. There were a lot of things that we found that people loved about the new design, but there were also many things that didn't work as well as was expected.

So what we are going to be doing and which -- that contract ended and we're now moving to a stage where we're going to be looking at the internal user interface of the system. But we are going to be

some guidance into how to answer those questions. And, also, as much as possible using language that are not terms of art, but are more understandable to the general public.

We're also looking at -- this would be an example of some of the additional help text that we would include. Also, we're exploring other ways of being able to target correspondence with the applicant. So in the old days, it was write a letter to the applicant and put it in the mail. Now, we send emails predominantly. But in some cases, to be able to point to exactly where the problem is and then ask a question about that and have the applicant be able to answer right within the application, within their account itself, could speed this process up and make it less confusing for applicants.

Having the ability to review and share the final product is another feature that we know users want. For instance, lawyers would like to be able to send the draft application to their clients to have them review it before it is signed and just to be able to see how the certificate is going to look before you actually submit it. So those are high-level features that we've been working on.

We then followed up in the work with

continuing to modify the work that had been done on the user interface by Deloitte and further refine that, do further usability testing until we get to a point where we're comfortable with the success of that.

We currently have 31 different applications for registration, including ones that there should be specific applications for. So there is still a great deal of work and that was -- Deloitte really only tried to handle about four of those specific types of applications. Some of them went very well and, again, some of them did not. So there is continuing work that will be done on that.

Also, in addition to the work that is being done on the interface, we also published a notice of inquiry about policy questions related to registration and to the public record, and the main topics were the application process and application information, public record and deposit requirements. And I won't go through -- so we received 54 written comments. We are still reviewing those comments. These are just a sample of some of the questions that there is much more detail about in the Federal Register notice.

But I wanted to highlight, particularly for today's session, a couple of the questions that we did

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ask is, what additional data should the office collect in applications for registration, and talking about identifiers and other information that would be useful for the digital marketplace to include. We currently do allow identifiers to be added on an optional basis within the current system. It's not used very often. But this is something that we definitely want to incorporate into the new system. And really in terms of even thinking about the public record, that we will be recreating, it's only going to be as valuable as the information that we get into the system.

But I think when you combine that with the other question, with respect to APIs -- and that's something that absolutely is essential to this new system. We want to have APIs that are both to be able to input information into the system so that businesses or other entities can create an interface that meets the technical requirements of the APIs and of the system to input application information to the office. But we also want to have APIs so that our public record can be extracted and augmented by anybody who wants to add additional information to the information that we receive.

So we would like to have as robust as possible the information that we are collecting that

as the user interface?

MR. KASUNIC: Yes, and thanks for that question. There is work being done. So as part of this modernization effort, the Register had created a new office within the Copyright Office, the Copyright Modernization Office. And within that CMO, there is a team, a data team. And they are just wonderful and very smart people who have already created a data plan that has been turned over to the Library of Congress.

So even before we get started in development of the actual registration system in any way, there is going to be -- what's going to proceed that is work on the replacement of our current public record, the search engine and the database. And we think it's essential to have that piece in place as we begin to work on development for the registration system itself.

And so that data plan is set. It will be flexible enough to be able to add any of the new information that we want to be receiving into that. It would basically be dealing -- the data plan is being built in an as-is basis, but would have that flexibility. And I think that is true of everything that would -- when I have been asked in the past, what's the most important feature in a new

would be valuable to the public in the public record. But to the extent that people do not do that, there are still other ways that we can connect our information with or people can, again, build upon what we do collect and provide additional information.

So I think we also, as I said, have not started development yet. We're working with the Library of Congress and the Office of the Chief Information Officer to determine the approach to begin development, and that should be beginning by the end of this fiscal year. But we still have a lot of work to do on the internal side of the system and revising the external side. So this is going to be a process that is going to be looking for a lot of public input throughout the entire process and through usability testing and other suggestions. So we do welcome that input. And I think I will leave it there. If there any questions, I would be happy to answer them.

Yes?

AUDIENCE MEMBER: Hi. This is great to hear the overview of what you're doing to modernize the Copyright Office. So this is all kind of on the interface layer between the internal in the system and the external in the system. How deep are you going? Are you also looking at database modernization as well

registration system, it's always been flexibility is the number one feature. And this time, we're not going to be creating something that is going to be stagnant or difficult to update, but that's going to be something that's going to be continual in an agile manner.

AUDIENCE MEMBER: I know you studied and provided a great deal of information about the cost of registration, what does the cost, and I presume you take all the costs and divide them up and how many registrations you have and so forth and that is useful. But I'm wondering if there has been any study done of the cost of nonregistration. What does it cost us in commerce for missing records, for things that we don't have? Has there ever been a study done of the weight of this system and the cost of missing information?

MR. KASUNIC: Not that I am aware of. But --

AUDIENCE MEMBER: I think it would be useful to balance them because some have suggested that the cost of nonregistration is so great that registration should be free or effectively free because the cost of nonregistration is so great that that's the one evil we must avoid. So I just offer that thought, that we

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1	might do a study of what it costs us when we miss	1	Well, thank you.
2	things.	2	(Applause.)
3	MR. KASUNIC: I think that's a great idea.	3	MS. ALLEN: And I now invite our next panel
4	Yes?	4	of speakers and presenters to come up and please bring
5	AUDIENCE MEMBER: I am wondering about the	5	your table placard with you.
6	mandatory information and what you mean by that.	6	
7	MR. KASUNIC: Just in terms of the	7	
8	application itself or whether we could require, as a	8	
9	technical requirement, that if a particular field	9	
10	isn't filled in that you will not be able to go	10	
11	forward. So having a technical requirement that, for	11	
12	instance, you have to have the author's name or you	12	
13	have to have that.	13	
14	So when it comes to things like unique	14	
15	identifiers, should that be something that we actually	15	
16	require? Certainly, I think we have the regulatory	16	
17	authority to do that, but at least from what we heard,	17	
18	what I have seen in the comments to the notice of	18	
19	inquiry is that everyone believes that we should	19	
20	collect that information as an optional matter, but I	20	
21	did not see anybody in favor of making that mandatory	21	
22	information.	22	
23	AUDIENCE MEMBER: Okay. I would agree with	23	
24	that.	24	
25	MR. KASUNIC: I think Susan is telling me	25	
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		1	

MS. ALLEN: Yes --

AUDIENCE MEMBER: I'll make it short. There's been a lot of work over many years on the representation of information, like a literary work when it's represented in digital form. And you talked about a unique identifier, but oftentimes, they talk about the identifier for the underlying material rather than when it's represented in a program, for example.

But in any event, the unique persistent identifier for the actual unit of information that is being deposited, the deposit copy if you were, I would think that that would be an interesting thing to consider in addition to other unique identifiers. It's the identification of the representation. Say, for example, people have worked on digital objects or digital entities more generally. And that, eventually, if you have the deposit coming in, that would be associated with the metadata. Perhaps.

MR. KASUNIC: Yes. And that's exactly the kind of information that we hope to receive from this. And I am sure that -- those proposals were not made in the notice of inquiry -- that we will be opening up for additional suggestions for that. But I think that would be useful to have.

RIGHTS MANAGEMENT

MS. ALLEN: We are continuing the conversation now with a series of presentations about registries and rights management. We're delighted to have, first, Stuart Myles, who has contributed to past meetings as well. Stuart is from the Associated Press and will give an update on the IPTC for us. Thank you.

MR. MYLES: Hi, everybody. My name is Stuart Myles, as you just heard, and I am Director of Information Management at the Associated Press. So I deal with all of the metadata for all of the content that we create and aggregate and distribute around the world. And I am also the Chairman of the IPTC. And, right now, I'm going to give you an update on some of the work that IPTC has been doing in the space of rights.

So first, IPTC, just to explain a little bit about that. IPTC is a news technology standards organization, the International Press and Telecomm Committee. And it's a membership organization comprised of over 50 different news and news-related and media organizations around the world.

So I work for the Associated Press as one of the founder members of the organization, but we have

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organizations from -- globally that represent large organizations, such as the BBC and French Press Association and so on, but ranging down to quite small organizations as well. And what we do is we create news technology standards to help news companies exchange business-to-business news primarily, so photo, video, text, audio, and so on.

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What I want to talk about today is the thing that we're perhaps the best known for, which is our photo metadata standard and particularly the rights related to that. So IPTC has created ways to capture metadata associated with photos. It is actually probably our most successful standard, not least in part because Adobe is one of the members of IPTC and has built in a support for the IPTC representation of metadata.

Abode is not the only way that you can get metadata into your photos, actually embedded in the images, but it definitely helps to have a big brand name associated with that. So you can capture information about what is depicted in the photo, rights information, licensing information, technical information about the equipment used to take the photo and so on.

Now, as you can see, often it looks like

pick and choose as to which images they extract the data from. I think they have some algorithms or heuristics for determining whether it's quality metadata or not.

But it's really encouraging that after a lot of negotiation, Google decided that they would like to do this. And, in part, it is because of the negotiations and presentations by photographers over the years to say they would like this sort of information to be automatically and more prominently displayed. So I think that this could be a foundation for further work with Google and other platforms to make more use of the metadata that people are embedding in images.

The second thing that I want to briefly mention is that IPTC is also working on, not just photos, but across all the different media types, a better way to represent rights and licensing and permissions and restrictions information in a machinereadable format.

So we partnered with W3C, the Worldwide Web Consortium, to build on their ODRL standard, open digital rights language, and created RightsML, which is a news and media specific version of the rights standard, to be able to make it easier to present

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what you're having to do as a photographer is type in a lot of data about your photos. Some can be captured automatically now because IPTC metadata is built into most digital cameras so it automatically injects things about location and the equipment that was used and so on. But we have often had photographers question, who really want to work in a visual medium, question why they have to type in all this data into forms, what's it really there for.

And we have said over the years that it will get used by different news agencies and aggregators and so on, and that's always been true. But, increasingly, the photographers are like, but what about Google? Are they ever going to actually use this metadata? So we were thrilled that last summer Google announced that they are now supporting some of the IPTC photo metadata. So specifically, some of the rights-related metadata is now supported by Google image search.

So what that means is that for some photos that have IPTC rights metadata, they will automatically extract that from the binaries and display that information. I say "some" because I think they -- I'm not familiar with all of the details of how Google has implemented this, but they seem to information in a way for machines to automatically evaluate permissions and restrictions. So to be able to determine whether or not a given video or part of a video or a text item or an audio item or a photo could be used in a particular context in a particular place and being able to automatically comply with the restrictions that the creator or the distributor have placed on a given item.

So this is important because, for agencies such as the AP, we produce 3- or 4- or 5,000 photos a day at scale. So we need to have ways for ourselves to automatically handle any restrictions, but also for all of our customers to be able to automatically evaluate them, too. So we're excited about this, but this is a big step up for lots of people and so we'll continue to work on this.

> And that's it. Thank you very much. (Applause.)

MS. ALLEN: Peter, do you want to come up or do you want to stay there? Either is fine.

So our next presenter is Peter Jenner. He's legendary in the music business, one-time manager to Pink Floyd, The Clash, Ian Dury, Marc Bolan, and Billy Bragg, among many others. He is now at the forefront of the debate surrounding the digital use of music.

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His overriding interest is in securing artists' rights and fair payment, and he will talk about Music 2025.

MR. JENNER: What am I meant to do with this? These do things. Oh, look. Does that do another one? What do I do? Someone tell me what to do. Oh, there it is. Oh, okay. No, that's the wrong way. Ah, there it is. I've got it, I've got it. Fantastic okay.

I'm beyond all that. I am in an age of -- as you see, I have a walking stick and I am wearing whatever this is. It's a sign of my ancient-ness and I'm dedicated to being more and more old age and, therefore, more and more out of touch with everything which is going on.

So I will now sort of blunder into something. First of all, let me just say, just so you know exactly where I'm coming from, I found a lot of the presentations all about rights and copyrights, I don't think I heard a mention of the performers or the writers or anyone who actually -- hardly any mention of -- I'm sure there were mentions -- of the people who actually make the music and their importance. For me, they are the people who really matter. And all this stuff about copyright, I know it enables them to get some of the money, but, unfortunately, it's

the book didn't want to give it to Columba because Columba took the book away and he set up a sweatshop of monks who were copying his own unique illuminated manuscript to the Bible. And then in the end, a Druid came along to -- after they had had a battle and the king had to sort this out. And they came to a conclusion that it wasn't seemly that they should be arguing over the holy book, and so it all got buried and Columba went on churning out his pirate copy of Finian's book.

So there you go. Early days. Early Christians. Away they went. Battle of the book. Well, that book went all over Europe. It was very important in the development of Christianity in Europe. And we're still trying to recover from it.

So anyway, I apologize to anyone I offended with that comment, but my father was a vicar so you see I have sort of ambivalent views.

The next thing I want to go on to is payment and attribution. I think that it's fair to say that most record companies, I know them much better than I know the publishing companies, but I think most record companies' data is based on payment data. They are mainly interested in who do I have to pay, so I can get it right so they don't come and sue me. I think

usually only some of the money. But, anyway, you don't want to hear any more from the raving lefty.

I am going to try and see if I can make this work because someone put this together. And you'll excuse my incompetence, I hope. Oh, that's the wrong way. You see, that's a bad start.

Copyright. The first reference we have of copyright goes back to 560 A.D., where there was a -- in Ireland, there was a bit of a punch-up between Saint Finian and Saint Columba and it ended up with a battle, resulting in the battle of the book. It was all over who would own the illuminated copy of the Bible, which had come all the way from the Middle East somewhere and it was the real McCoy. And so what happened was that Saint Finian brought it over and Saint Columba wanted to take it over and there was a battle of the book. And in the end, they decided the best thing was to remember that it was a sacred book and that really we shouldn't go around killing people about God's word. So it ended up in a sort of more peaceful solution.

If I can find the next bits where I'm meant to be going here. Anyway, that was Saint Finian and Saint Columba. They had a big old punch-up, but it was the first sort of dispute because the one who had

the much more interesting thing is the attribution data, who is involved in this recording. And there is no way that people kept the recording. The payment was all done in contracts and there's lots of bits of paper and lawyers and all the rest of it. Attribution requires people to note down who was actually at the studio, who played what, keep it in a formal orderly way while taking lots of drugs and lots of drink.

So the attribution data has always been a little bit ropey and it will always be a little bit ropey because also people know that the more they can get attributed, the more money they will get. So you have double things going on there.

So I will now try to move on to what do I get to next. Voice-activated services. Now, voice-activated services, I think, again, bring us into an even more problematic area. Because how is it going to deal with strange accents, people speaking in foreign languages or speaking a language with a heavy accent? Is it going to make mistakes? Almost certainly. People with voice impediments almost certainly have a problem. Voice-activated services, I think is likely to be very jolly-good and groovy, but I don't think they're going to be entirely accurate.

Also, it depends on the instructions you

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give it. Play me some jazz. What jazz are they going to play me? They are going to play me the jazz which the programmer likes, which the record company has passed some money around or some influence so that gets played. What gets played? Is it just what I've always had before, but maybe I want to hear something new.

Voice-activated services I am sure are useful, sure going to have a great future, we're all going to use them, but I think they have problems with regards to how far you can rely on them in terms of any form of payment.

So search and discovery, I think in the streaming world, which we're in at the moment and will probably be for a bit of time yet, is enhancing that search and discovery. So it is more than just giving you what you've always wanted, what you've always heard and just like any other, you know, like the radio or whatever, is exploring. The potential, I think, of something like Spotify is that it's got God knows how many million tracks that you can search and discover in there. You can explore things.

Oh, God, time is up already and I haven't started. Oh, my God. What am I going to do? Okay. So search and discovery, I think is really extremely

is about the speed at which the data is received, the different types of data -- so it's variety, it's veracity -- is a true data or is it just some rubbish data. It's visualization so that we can see it and work with it. The data, the variability of the data, the data whose meaning is constantly changing, you know. Quite what do we mean? What's a jazz record? What's a dance record? What does that mean? The size of the data, the volume, and then the value. So these are very important issues, all of this to do with big

God, they should never let me loose on this. Numeric standards. Here I think, again, that we have to rely on numeric standards as far as we can because we can't rely on language. So we have to rely on numericizing the artist, the performance, the songs, they all need to be numbered in an international world -- which even in a Brexit Britain, we're still going to be in an international world -- we need numbers because language is a big problem.

So we have got to have numeric structures for the performers, for the songs, for the publishers, for the record companies, for all those things. And developing a structure which can work internationally with many languages is going to be a real challenge

important because I think that's what people want to do. And search and discovery is going to rely on good data. And I think that we can be pretty confident that the data won't be very good in terms of, you know, is it precise or is it just approximate, you know. How am I going to say, oh, I really like that, can you can be more like that. That search and discovery is going to be very corrupted I am sure and very influenced by all sorts of things.

Have I finished? Have you got rid of me now?

(Laughter.)

MR. JENNER: Am I still going on? Yeah, yeah, okay, okay. So anyway, we go on and I have a plan here which I find very interesting. Big data is something we all have to go on about. Big data is something that is very important. Everything is about huge data. The more data, the better; the more analytics, the better. That is great. Fine, I'll buy that.

But there are the seven Vs of big data, which I think data is clearly what's going to be driving the business and big data -- the bigger the data, the better as far as I can gather, speaking as an old man. And so that we have the seven Vs, which

for us all, and it is something which I think we have to get to grips with. Numeric standards.

Do I know what I'm talking about? No, I don't. But I've got a good bulls--. So finally, if I get it -- oh, wrong one, better try the other one. Yeah, we had that.

No entity without identity. The most important thing in data I think is that you can't get into the database without having an identity, and I think that's something we are taking about a lot.

Let me finally say -- I think you have to get rid of me, because I have to get rid of myself -- is that I'm working with the IPO, with people who know what they're talking about, and we're trying to work out a structure for the data and thank God, I mean, here he is. He's trying to hide because he wants nothing to do with me up at the end there, someone who knows what he's talking about, which it's the accent, Mark Isherwood, who is cringing at the thought of having anything to do with me. And I don't blame him.

I do know what I'm talking about. I've been doing it for ages. Data is important. Can we however make sure that the bloody artist, the bloody creators get paid, not just the companies. That's what really drives me.

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Developing the Digital Marketplace for Copyrighted Works

Thank you very much. Good evening and good night.

(Applause.)

MS. ALLEN: Thank you, Peter.

Up next is Niclas Molinder, the CEO of Session, formerly Auddly, a global hub for authoritative preregistration music metadata sourced from creators. In the interest of time, I'm just going to turn it over. Welcome.

MR. MOLINDER: Thank you. And thank you, Peter, for the warmup because they saved me until after your speech because now we're going to talk about the creators.

MR. JENNER: Oh good.

MR. MOLINDER: Yeah. So, yeah, my name is Niclas Molinder. I'm from Sweden. I've worked as a songwriter producer for more than 20 years. I found a couple of up-and-coming songwriters and started a publishing company to be able to help them. And for the first time, I was on the other side of the table negotiating with creators, and they were out working, writing songs in the world, and it was my responsibility as a publisher to register all their songs. But they never gave me data. So that's when I realized how dark and deep the whole of metadata is,

perspective. For them, as it is for the consumer, it's a song, it's something that comes out of the speakers. And that is the biggest focus in the recording studio is what comes out of the speakers. But what they don't know, the creators, is that it is so much information that is linked to the sound that they hear. And our problem here is that they don't care. They don't care until they get the royalty statements because then they scream and shout and complain that they don't get the money that they are supposed to have. But they don't really understand that it's all based on the data that is born when they create the music.

So see it this way. A creator in the studio, how can they keep control of all the different legal roles they have? They will not. They have not historically never been aware of what they're doing from an administration point of view. And they will not in the future. So we must use technology to make it easier for them to not have to think about it, to not bother about it. Maybe once when they set up some kind of an account, hopefully on our platform, then they need to know what they're doing. But from that moment on, it should be done automatically.

So in this case, a creator -- let's say that

especially from the creator side.

I started a company because of my own need of something that solved this problem. I had a great honor to get both Mr. Bjorn Ulvaeus from ABBA and Max Martin as partners because Max Martin had the same problem with all his writers. So we started a company that was called Auddly, and this is five years ago. No one understand the name so we decided to change names. So now, we rebranded the company to Session, which is much more easier for the creators to understand what we do.

On South by Southwest a couple of weeks ago, we announced a project called Creator Credits, which is the next step for the company. We have a platform that is out on the market, and we have taken the first steps to solve this problem. But, now, with the name change and this project we will actually -- with the project, we have some of the most important companies and organizations in the industry joining our project to feed the industry with high-quality data from the creators, because we hear a lot of good things going on in the industry all from blockchain to new databases and stuff, but we need to make sure that we feed it with the right information.

So let's just get it from a creator

this is a songwriter and a guitar player. If that person writes a song, sings a melody or writes a lyric, they have one identifier and one legal role. But the second after they play the same song on the guitar, but will record it with a microphone, then they have a completely different identifier and a completely different legal role. And how can they keep track of all this? No, they can't. So we must help them.

And now the do-it-yourself era has started. So more and more artists and producers also act as the record label, they own their own recording, they own their own publishing, they are self-managed. So in other words, one single person can have all these different roles at the same time. And it's impossible to keep track of that for that person.

And add to that, an average registration for new compositions today has five songwriters to it. The problem is then that we have silos with five different people that are represented sometimes by a manager or publisher or self-controlled, it doesn't matter. But the most important thing when we do a registration, both for credits and then especially for payment, that everyone has the same opinion about everything.

Start with just, do we know who we are? One of the first songs that my songwriters got back to me when I first was a publisher, they had been in New York in the studio and they came back to me with an amazing song and asked me to do a registration. And I said, who did you write it with? With DJ Pete. I am like, yeah, but you need to give me something more than DJ Pete. They couldn't because they bumped into this DJ Pete in the studio that wrote the song. They had a phone number, so yeah, we found out. But how many hours did it take and how much did it cost to just find out who were they? So identify them, who they are. That is one of the most important things.

So our platform -- and in this proof of concept that we're now doing, the Creator Credits, we're using our Session platform to collect this information, upstream in the studio when the music is created. We are the only platform available right now on the market that has success both to the IPI and IPN identifiers, and we're now also adding ISNI onto this. So we will be a platform where all the identifiers are gathered under one umbrella, and that together with the legal name. The legal name we needed, but the most important things are the identifiers because we cannot use names in text strings anymore. I mean,

client has. We make sure that the data is pushed to the right organization that needs it for registration.

So just for you to understand -- yeah, and this -- now we're talking app and web. But from day one, I said there is one front end where we need to be. We need to be in the recording studio and in the softwares that the creators are using on a daily basis. So what we announced on South a couple of weeks ago was a huge step forward for us. Avid, the company that developed Pro Tools, which is one of the most used softwares -- so from now on, Session will be [music playing over speaker]. This is how it works. Maybe you recognize this song. This is unique material. This is an ABBA song and this is how the creators work in the studio.

Each track contains a performance of something, of someone. This is Bjorn Ulvaeus from ABBA that played the guitar. So here we need to identify that it's him playing. That is now possible to do directly in the program.

It's nice to just listen. So each track will then -- you will be able to add on each track who is playing what and that information is captured in the studio. So in the end, we get in Pro Tools all the identifiers, recording locations, who they were,

every keyboard in this room you cannot even write my name because I have a funny Swedish letter that you don't even have on your keyboard. So how can you write my name? It's impossible.

So all the identifiers, together with the title of the composition and the recording, hopefully are split between the songwriters. That is -- we need it sooner or later, but we need to start with finding out who they are. That together with roles and recording locations and then the identifiers for the composition and the recording of these is -- okay, I know. I'm going to hurry up.

So that's what we do. So the proof of concept is get authoritative data in time when it happens because creators forget. We need to get this data when they do it in the studio, add identifiers and then link them to each other. This will end up in the next version of our application, which we're going to be a white label version. So all companies and organizations that want to use our platform can brand it as their own app. That is going to be especially good for the CMOs because the majority of the CMOs don't even have an app. So everything will be branded as their own, but just powered by Session. And in that case, it doesn't matter what legal role their

and we're using an amazing technology with their phones so when a creator walks into a studio, Pro Tools would automatically recognize that they are in the same room as the computer that's recording the music and the studio engineer will easily just click if that person is doing something. And we will, of course, make it very simple and easy to understand UY and UX. So the creators don't now even have to take the phone out of their pocket. They are recognized as soon as they walk into the studio.

But we, of course, are aware that music is written and produced not all the time when everyone is in the same room. So of course, they can use the app and recognize each other by connecting through the app. When everything is done, we print, we let the creators or the authoritative source or the authoritative person verify the data so we know that everyone has approved.

And when the data is approved and we have everything we need, we are going to use the DDEX standards to just push this out from our system with a format called RIN and the record labels and the PROs and all the CMOs will get the information. And in the end, the DSP and the consumer that's listening to the music will not only get full credits about who did

DCVCI	oping the bighar Markerplace for copyrighted Works		0/20/2017
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	what, where and when and, believe me, I am a nerd, so I have in the system, we can also add which microphone it was and which recording console and which guitar. So it will be a completely new experience for the customers that listen to music with full credits. But, most importantly, we now all know who did what, where and when, so when we have money we can push the money to them. So that's what we do. Thank you so much. (Applause.)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	runs DDEX, Digital Data Exchange. DDEX is a standards organization primarily in the music industry. It's a membership organization. We have multinational companies, startups, and everything in between. Indeed, about 30 percent of our members are companies that have revenue of less than \$2 million. So it's not just the big boys; it's a significant part of the marketplace involved. The standards we focus on are the communication of metadata between all the different players within the music industry. So for example, record companies need to send metadata information to the DSPs so that when we, as consumers, go on to their services, we can see exactly what it is that we're about to play. There are a number of other standards. There are about six families of standards altogether, and they are all dealing with different types of business transactions throughout the entire supply chain. I think the one I would just bring to your attention is this recording information notification standard which was a bit of a departure for DDEX because it's actually not, strictly speaking, a communications standard. It's more a standard way of
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	PANEL DISCUSSION: REGISTRIES AND RIGHTS MANAGEMENT MS. ALLEN: Thank you so much to our panelists. I think we're going to turn the discussion over to be moderated by Paul Sweeting, who I just wanted to take a minute to introduce. Paul Sweeting is a veteran business journalist and industry analyst specializing in the intersecting worlds of media, technology and public policy. He's the founder and principal of Concurrent Media Strategies and also is heavily involved with RightsTech Project, cocreator, which is an annual conference in New York City that involves many of these same issues. So thank you very much. MR. SWEETING: Thank you. We're also starting an annual conference in Frankfurt, Germany if anyone is interested. Well, that was quite a series of presentations. But, Mark, you were a little bit left	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	collecting metadata in the studio, as Niclas has said, and allowing that metadata to travel around with the actual binary files in its journey through creation. Again, as Niclas said, things don't get created, or at least not in their final version, in one studio or even necessarily in a studio at all. And the ability of RIN and what Niclas and his colleagues are going to be doing enables metadata to travel with the files. Gradually as it goes through each individual activity, you just add more and more metadata. So it is more like a bucket which gets filled up and then once the content has got to the point where it is ready or nearly ready to be released, then it can go forward into the record company supply chain, also into the musical work society and the performance society supply chain so that all that data is already available almost before
19 20 21 22 23 24 25	out of the party. You didn't give a presentation. So I wanted to give you the first opportunity to speak here and, you know, if you wanted to talk about DDEX's involvement in the creative project that Niclas Molinder was just talking about. MR. ISHERWOOD: Hi, everyone. My name is Mark Isherwood. I am part of the Secretariat that	19 20 21 22 23 24 25	anything has actually hit the streets. That shows my age. Because things don't hit the streets anymore, do they? And this project, if they can prove it is a proof of concept, is potentially a game changer because, for the first time, we will have all or nearly all of the contributors to each sound recording

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that gets released listed and, more importantly, linked to their unique identifiers that the industry uses to actually make sure of the two things that Peter was emphasizing, which is making sure they get paid and attributed.

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And so DDEX is very much in support of the project that Niclas is doing. Our only kind of proviso, if there was one, was make sure that it's an open and not proprietary solution. The nanosecond it becomes a proprietary solution, people won't use it because people need to trust, and the only way in this particular space where it's sort of pretty competitive is by using standards rather than proprietary solutions.

So Peter and Niclas are very much in the same place in terms of what they're trying to achieve, and DDEX very much supports that. I can't really talk to anything Stuart said because it's not my area of expertise.

MR. SWEETING: So thank you. Niclas, so Mark indicated that this is at the proof of concept stage right now. Can you give us a little bit of a sense of what you hope the timetable will look like?

MR. MOLINDER: Yeah. I mean, to say it's a

MR. MYLES: So I think IPTC is really the photo metadata where it's the case that it's software and hardware that's doing capturing of the metadata. And we try to, the agencies such as AP, try to encourage journalists and photographers to enter metadata at the point of creation of the items, although often that isn't the case. It's often later that metadata has to be added.

In terms of how long, it's been a long, long process. So the photo metadata standard of IPTC is over 10 years old. And it was a lot of negotiations and meetings with the camera manufacturers to get them to agree to adopt the IPTC photo metadata standards embedded into their digital cameras and negotiations with different software vendors and so on.

As more camera manufacturers and software manufacturers adopted the standard, it becomes easier to get other people to adopt it, too. But it's also the case that just because it's possible to enter metadata accurately, does not mean that metadata gets entered accurately. So it's not unusual to see -- so AP aggregates photos from lots of different producers both in our own content and in other people's content. It's not unusual to see people who have typed things into fields because they had to, but it didn't make

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proof of concept, the platform is already built. So we have the platform from our side. It's there. So the proof of concept is to get all the other players in the industry to really adopt our platform. And we need to get the workflow, how the information is going to flow from the studio into Pro Tools, in this case, but there are other DAWs waiting also to join the project. So there will be more than just Pro Tools, of course. And then how it flows through a record label, a publisher, a PRO, and then to the ESP. And we will present the proof of concept in November in Stockholm when the big DDEX meeting is in November. So that is the time frame for the proof of concept. And, hopefully, we will see the first releases in production early next year.

MR. SWEETING: Stuart, so IPTC has already traveled at least some way down this same path in that you have developed the means to capture metadata at the source, at the point of creation, and have, at least to some extent, managed to get that capture into the software and even, I gather, the hardware, DSLRs. Can you tell us a little bit about how -- well, first of all, how long has that been the case and what are the sort of lessons learned from trying to implement something like that?

any sense what they typed in. Equally, it's not unusual to see people looking for a place to type in metadata and they pick a field that is not the right

So one of my favorite examples of that within AP is people are required to -- we require a journalist to identify who are the people who are in the photo. There was a number of misunderstandings and somebody created a tool that -- within AP that encouraged the journalists or the photographers to type into the headline field the name of the person depicted because on the grounds that they forget, like, well, it's a person, they have a head, so we'll put them into the headline. Unfortunately, that's left us with a legacy -- rather than the person featured field. So that's left us with a legacy of bad metadata that we have to clean up.

So it's great to have the metadata, it's great to have the manufacturer support it, but it's the people who have to deal with it and have to work with it. It's also the case that there's twin demands of we need more and more and more metadata, but that becomes overwhelming. So I appreciate the idea of being able to tag the mics that we use, and that's not necessarily a bad idea, but if you have hundreds or

thousands of fields that people could use, it becomes overwhelming. So I would be a bit cautious about that as well.

MR. ISHERWOOD: I think that story could be said or told in any media industry. And, actually, that is one of the hardest things. I think the important thing about what the Creator Credits is doing is it's more automated, at least about the people. But it also points to the fact that there is still a need for creator education about why these things are important. What is an ISWC? What is an ISRC? Why do I need one?

I was at a conference in January where there were a bunch of songwriters, and they were talking about the importance in data. They knew what an ISRC was. And somebody said, well, do you know what an ISWC was? None of them knew. And, yet, every work they've created should have an ISWC. So if they don't even know what it is, they're not going to think it's important in terms of trying to capture that data at the creation point. So there is definitely an education need right across the board, not just in music, but in every other media type as well.

MR. SWEETING: Yeah, I was thinking, Stuart, as you were talking from my days as a working

the fields and the names of the field. Of course, I mean, our plan is to -- how we structure our platform is that all fields are not available for everyone. So if we're talking microphones, then it is only the studio engineer that has that opportunity to fill that in. But as you had your header thing, I had a crazy thing -- I got contacted through our support. It was a songwriter from London that called me or wrote on the support and was so upset that our system didn't work because it said that that person was a songwriter CA. I'm in London, not in California. But CA stands for composer and author, so that's lack of knowledge. So we need to educate.

And based on that, Max Martin, Bjorn Ulvaeus and I, we picked up on that and we've been talking so much about it. So one and a half years ago, we started a foundation called Music Rights Awareness Foundation and we started a project in Africa, in Rwanda, Malawi and Tanzania, where we educate music creators. But the African product is just one start. We want to do this globally.

So I am kindly reaching out to everyone. If you're interested to be part of this, we have a great idea how music rights education should be done. We should, of course, use technology. It should be app-

journalist, you hated having to collect the information on who was depicted in the photo. And I was going to ask, but I think Mark just sort of answered it, you know, what is the human factor here? And to what extent can you take that ambiguity out of the system? Do you even want to take it out of the system?

MR. MYLES: I think a couple things. One is, yes, the human factor, the people still matter a lot. I think that one thing that's helpful is if people feel that there's a point in adding all of this metadata. So for us, in the news industry, I think Adobe adopting the standards and, more recently, Google adopting certain ways of extracting metadata, it makes it clearer what the point is I think.

But in terms of whether you want to take people out of the equation, my view is that automation can help, but my experience as a technologist is that automation is never 100 percent accurate and so -- automation is definitely good for consistency and scale, but you still want people to be overseeing the work to make sure that it's relevant and accurate and so on. I think there's a balance to be struck.

MR. MOLINDER: So I'm going to pick up on the education part, but I want to refer to Stuart, to

based and I want it -- I know that strong influential are the creators. It would be good to listen to Ed Sheeran when he tells why you need to keep control or what you need to learn about a specific code or what you need to do or if like Max Martin telling other producers through the app that you need to do this and that.

So we're working on this platform right now for -- you know, to scale we need to use that technology. So I reach out my hand. If you want to be part of this work, please let me know.

MR. SWEETING: Jim, did you have a question? JIM: I have a question. You have discussed a lot about creator data, but I'm wondering about audience data and how it factors into rights management. So if you're looking at a particular work and how it's been used, surely one component of payment must be its value to the audience or to the publisher. And I'm wondering about the flow of data back up the chain about how the work was used, how many people it was exposed to, perhaps how much value it carried.

I mean, I know as a member of a collective rights licensing board, we struggle with how to allocate money in a pool, and without data about the

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value of the work and how much it generated, it's just a guess as to how much money ends up in the hands of the creator, as Pete points out. So there really is a two-way data flow, but we haven't discussed data back up the chain.

MR. ISHERWOOD: I mean, just speaking with purely my DDEX hat on, one of our standards is what we call the Digital Sales Report, which enables DSPs to report all of the uses to various types of copyright owners. And I was in New York for three days this week doing just that, going through working with rights owners and licensees about how we structure this report and what data is needed.

I know just, you know, to reassure you, these files are huge. So, you know, that is happening certainly in terms of where that standard is being used. That's just, say, purely with my DDEX hat on.

AUDIENCE MEMBER: [Off microphone] By the way, you needn't reassure people that it's huge. When it arrives on paper, it seems to have taken an entire tree, but it's not that anyone can make sense of it or figure out how that justifies the meager check.

MR. MOLINDER: You're right. What I wanted to say about that, I mean, we said we need to educate creators to do something and learn. But exactly as

that if you work somewhere and you have no idea how much salary you're going to get. This is a guess every time. So pipeline preview of your income, that is a huge need in the music industry.

MR. SWEETING: Bill?

AUDIENCE MEMBER: You talked about the application and the way it allows creators to insert information about their creations. In fact, the application already has some awareness of its own in terms of being geolocation aware to the studio, for example. Is there any mechanism for the Session app for third parties to contribute data to the record of the song? For example --

MR. SWEETING: Such as who?

AUDIENCE MEMBER: Well, the first person might be the recording engineer who's there. You mentioned they click to say who is particularly recording on a track, but what about the manager who's standing outside the studio or the fan that's out on the street or someone else who has information about that recording session that they want to contribute to that picture? For example, someone who's interested in microphones wants to fill in the field, although no one else has the time to do that.

MR. MOLINDER: It's nothing that we're

you said, if creators in our Session app, for example, or in any app could, on a daily basis or weekly, get an overview of how many streams they had on Spotify, where in the world, especially if we're talking selfmade artists, they know where they need to go on tour, where they see where their music is used.

So you are right, I think that is a key. But then we, as an industry, need to work because the data is there, and I know that the files are big, but I don't believe that that's going to be a hurdle for us because there other industries -- take credit card companies, for example. Now, we're talking big amounts of data. So say that the music industry handles big data, I am not so sure. Then we need to build our systems better because there are other industries that handle way much bigger data flows than we do. So you're right. That is something we work really hard to get that information to the creators.

Last about that, as a songwriter, a couple days ago, I just received my statement from STIM, my copyright society in Sweden. And as a songwriter -- and this is no critique to STIM, but there is no pipeline preview. Every time I do this, I have a procedure. I slowly, slowly scroll down because I have no idea how much money I'm going to get. Imagine

1 working on right now, but it's very interesting

because the subject has been on the table. So we have discussed how much data can we add to this. But,

discussed how much data can we add to this.again, what I was told now is actually just for

5 composition and the recording, who did what, where and when. That is the first step that the proof of

when. That is the first step that the proof of concept is going to solve. Then these ideas -- I love

that -- you know, to get more and more information.

So, yeah, it's definitely an option.

MR. SWEETING: This is the easiest moderating gig I've ever had because there are so many questions.

Paul?

AUDIENCE MEMBER: Just to add to that, if these things use standard identifiers, then the data on the microphone doesn't need to live in that app, it can live somewhere else and be cross-referenced because they have the same identifier in them, and that's true of the Copyright Office's database, it's true of SoundExchange, it's true of libraries. If you've got a common underlying firm foundation, the data aggregates and adds value to all the others as well.

MR. MOLINDER: And that is important to say that the Session database, we don't hold the

identifiers. We're just mirroring what's going on at the original source. But if something changes through the APIs, we update.

It was interesting to see the Copyright Office, how you are now planning to do your modernization. One thing that hit me when you did the presentation was that what I think that we need to get away from is human retyping. The information gets retyped over and over and over and over again. So I think what the Copyright Office should do is see how you can, through APIs or CWRs or any format, get the information without people retyping, because that is a huge risk for error.

MR. SWEETING: Yeah, in front?

AUDIENCE MEMBER: So I think that one thing that's been left out, and I see this industry going kind of in a direction where there will be a conflict, oddly enough, having to do with privacy. We're talking about getting all of this data, more data, putting it out. The ability to process that data is so great today that I think you're going to have privacy problems or unintended consequences. We could just look at it in that way. And by not being aware that that will be a risk, I think that awareness

doing it.

MR. SWEETING: Okay.

MR. ISHERWOOD: I'm sorry. So the other thing is that it's not about monetizing the data, it's about using the data to make sure that money flows for the creation. And I know from talking to my members, they've all spent -- and I'm talking about copyright societies, record companies, all these kinds of guys have spent a fortune around GDPR and how they use the data they get. So I think it is already in people's consciousness.

MR. SWEETING: You brought up a point that I have been wanting to get to. Do we have any other questions on this before I change the subject?

AUDIENCE MEMBER: Just a quick question. You just said you're a data hub, not a database. How are you not a database because you're collecting the data and then you may distribute it downstream, but there must be some repository there. Thanks.

MR. MOLINDER: I mean, of course, we choose to say "data hub" because we're a hub that distributes the data to the receiver that needs it. But, of course, the data comes to our platform first. And we're deeply into discussions how we're legally going to -- if we're going to delete data when it's gone

MR. MOLINDER: Yeah, I don't know if that was a question or just a --

AUDIENCE MEMBER: Sure.

should start now. I guess is my...

MR. MOLINDER: Of course, we are aware of that. But since we're not a database, we're a data hub, we don't own data. We just collect the data and push it forward to the organization or company that needs the data for the clean registrations.

AUDIENCE MEMBER: Right. Well, monetizing the data is such a large part of the revenue stream of all --

MR. MOLINDER: Yeah.

AUDIENCE MEMBER: This is a difficult conversation and a big one.

MR. MOLINDER: Yeah, I know.

AUDIENCE MEMBER: But I think the idea that we can solve this by data alone is very problematic.

MR. MOLINDER: I know. But I don't -- I should not see it from that angle because then I would just close everything down and just go home. I try to stay positive. We have a big need of solving the data collection in the studio and I know how it is to be there. So I'm going to work for that, and then we need to solve the legal issues with privacy issues and so on. But I believe that this is the only way of

from our platform. But we also see the requests, especially from the CMOs, to keep the data on our hub as a reference point if something goes wrong later on. You can always go back and see it. So see it more as a reference point, not a database. So that's how we see it.

AUDIENCE MEMBER: Thank you.

MR. SWEETING: Okay. So Mark just touched on something and Peter touched on this earlier in his presentation. We've been talking about capturing metadata on the participants in the creation and making sure works can be properly attributed to them or their work and other works can be attributed to them. And earlier there was a panel on specifically the question of attribution.

The thing I would like to get to in deference to the name of this panel is, you know, how do you connect data on who did it with data on who owns it? Because those are not obviously the same thing and there is an air gap it seems that we still haven't really addressed as to how collecting this data can be used in the process of paying the appropriate people since who did it is not necessarily the same as who owns it or who's entitled to some piece of it.

MR. ISHERWOOD: Well, a simple answer to that question is there are already processes and systems in place that actually make that connection. But what I would say is that that's been very, very difficult up until now because very often you only have, you know, one piece of cloud in the jigsaw and maybe one corner and you've got to somehow fill in all the other pieces of the jigsaw in order to determine who owns the rights. I think what these sorts of projects do actually is at least give you 90 percent of the pieces of the jigsaw and you've got a much, much better chance of getting the right data right thereafter.

MR. JENNER: One thing that I've been recently seeing is that there's a new copyright act in South Africa which includes an obligation to pay the creators, and I think that's really important. Because on the whole, the obligation is to pay the owner or the owner gets paid by the user and the relationship between the company and the individual performers is often down to contract, whereas the top thing is down to legislation usually. There is a legislative backup on it.

I think that that's really a very important issue going forward we should be thinking about is

MR. SWEETING: So speaking of legislation, there was -- it's not legislation, but there was -- obviously, earlier this week, the European Union or the European Parliament passed the long gestating copyright directive. And it introduces a number of new mandates regarding licensing and filtering or monitoring at any rate. That, to me, apart from the merits of the case, is a monumental data issue. Do we have the data infrastructure in place to actually implement those requirements?

I mean, Stuart, Article 11, which I understand is now Article 15, essentially seems to envision that platforms, online platforms, would have some sort of licensing agreement in place with every publisher imaginable. Or there needs to be some automated system for those rights clearances. Are we anywhere near that?

MR. MYLES: No. (Laughter.)

MR. MYLES: I mean, I think it will be really interesting to see how that legislation in the EU works out. There is worry that it means that only the biggest platforms can, in fact, comply and only the biggest publishers for news and media can comply, which I'm sure is not the intent of that legislation,

whether there shouldn't be a similar obligation on the record companies or the publishers to fairly pay the performers and the writers in the same way that the users of the material are obliged to pay the owners of the material.

MR. SWEETING: That should be a fun fight. MR. JENNER: Yeah. Oh, I don't think I'll be very popular with that one, but I think that's one which I shall be hitting my head against the wall for some time.

MR. SWEETING: Stuart, did you want to add something?

MR. MYLES: Yeah, just as, I guess, the nonmusic representative on the panel, I think it is a very complicated question because even who is the right owner for a given work varies depending on what jurisdiction you're in and so on. So probably it has to do with distribution agreements, but it also varies over time. And, yes, I think the trend is, in some places, is to ensure that the original -- what we call the original creator, because there can be multiple creators, the original creator, there's a trend towards trying to make sure they get some kind of compensation no matter who the various rights owners are.

to squeeze out smaller players -- small and mediumsized players. But even with the large organizations, it's not clear to me that you can instantaneously determine that a given piece of content belongs to a particular rights holder or a particular creator.

There are techniques that are available in terms of fingerprinting and so on. Clearly, platforms like YouTube have implemented a certain amount of automated detection of copyright holders. So it's not totally impossible, but the implication seemed very significant. On the other hand, though, I think it's encouraging because it requires people to and companies and organizations to work towards being able to support those things.

MR. SWEETING: Yeah.

MR. ISHERWOOD: Having said that, one would hope, given how hard the rights owning community pushed for Article 13, at least some thought has gone into how we actually administer it if they are successful. Maybe I'm being a little naive, but one would hope so.

MR. SWEETING: I wanted to follow up on something Rob said earlier in his presentation regarding the new registration system. I was struck that nobody thought, apparently in the public comments

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that have come in, nobody seems to think that including unique identifiers, numeric identifiers should be mandatory in the registration process. I was wondering if anybody up here, anybody on the panel had any thought about that. Would that be, you know, a useful system in terms of trying to manage rights and making sure that you could properly identify the people involved?

MR. ISHERWOOD: There are elements of that going on within DDEX because of the way we structure the messages. There will be certain things that the organization agrees, certain items that the organization agrees has to be mandatory in any given business transaction and, in some cases, that will include identifiers.

It may not be the international -- the global ones that we've all been talking about, but it will make -- for example, in the Digital Sales Report I was talking about earlier, the DSP release identifier is mandatory in the message. Because it's the only thing, as things stand, that the musical work rights owner certainly can hold onto in order to be able to do their matching and charge the relevant fees. So there are little tentative steps towards that. I know your question goes broader than that,

The ISRC/ISWC link thing is actually a bigger conversation because that's needed globally. That's not just needed in the US. And whilst that may be a requirement within the legislation -- and I have not learned it off by heart by any sense of the imagination -- but it must not be forgotten that that is a global requirement and there are projects going on that are looking at that. Some of them are quite advanced.

My concern always is with these sorts of things that those companies who are actually involved in those projects are actually doing it as a land grab, and I think something like an ISWC/ISRC link system, let's just call it that, should be a utility that is supported by the industry in some way or another and not kept behind closed doors because that -- it comes back to the proprietary solution, the point I was making earlier on.

MR. SWEETING: Time. Oh, I'm getting the look. One more quick question.

AUDIENCE MEMBER: I would just point out that there is, although not in the US, there's a treaty and law requirement for an identifier in the Berne Convention, one, in the moral right of attribution. So if you have a system that doesn't

but just from my little world, that is where we are.

AUDIENCE MEMBER: Paul, it's worth nothing that MMA requires that to the degree they're available.

MR. SWEETING: That's the other piece of recent legislation that is important. MMA. We were discussing this briefly over lunch, Jim. We're not even -- it's not even 100 percent clear to me, at least, how exactly this database is supposed to be compiled, whether or not it has to be an entirely new sui generis effort or whether it can build on work that has already been done.

Any thoughts on the best approach to actually compiling -- and pardon me, Stuart, this is basically a music question. What is the best approach from an industry perspective to matching ISRC and ISWC? And if Bill wants to weigh in on this, please go ahead as well.

MR. ISHERWOOD: Well, in terms of the MLC, my understanding is that there are no proposals that I am aware of about building this from the ground up because that, frankly, would be madness. And there is a process going on at the moment where current vendors are offering their services to provide and meet the requirements that are set out in the law.

pass on attribution, it's clearly a Berne violation.

And, second, in Article 10 of the Berne Convention, which requires that news summaries contain both the publisher and author, now obviously the clearest violation is Google News, which doesn't do that because it doesn't have to because the US has never implemented that, but if you're working internationally, especially with news, you should be looking at fulfilling the Berne requirements for attribution identifiers.

MR. MOLINDER: Yeah, just about the ISRC/ISWC link, back to that, from Session, we have offered CISAC that is operating the ISWC assignment system to -- because everything is about time. ISWCs are assigned way too late in the process. So we are offering them to start assigning ISWCs already in Session when we -- in the creation process. Early, early. And Session is already an ISRC agent for those that are doing it themselves. We also provide them with ISRCs when they bounce the tracks in Pro Tools directly.

So my view here is that if we just can get the assignment of ISWC earlier, we can match the ISRC/ISWC before it even leaves the studio.

MR. SWEETING: I think the ax is falling on

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Deveio	oping the Digital Marketplace for Copyrighted Works		3/28/2019
1	185		187
1	us, folks. Thank you very much.	1	occurs.
2	(Applause.)	2	In the world of technology and in the world
3	MS. ALLEN: Thank you all for your time and	3	of our modern world, everything is about frictionless
4	your contributions.	4	experiences. So today what we're going to do is we're
5	·	5	going to have Dick do a brief demo. But we're going
6		6	to talk a bit about where the creator fits into this,
7		7	what the changes in the value chain are in respective
8		8	industries and how the thinking has evolved and then
9		9	how technology is impacting the licensing and
10		10	monetization process.
11		11	So why don't we start out and do some quick
12		12	introductions. Start with Ken and then Dick. Dick is
13		13	representing a company that's got a new user
14		14	experience and a new use of data coming out. So why
15		15	don't we start with you and then, Dick, you can give
16		16	an introduction and do a quick demo.
17		17	MR. HUEY: Sure.
18		18	MS. NAUMAN: Okay.
19		19	MR. UMEZAKI: Hi, I'm Ken Umezaki. Some of
20		20	you saw me earlier. I'm the CEO of Dot Blockchain
21		21	Media. We are a rights management solution that
22		22	leverages the blockchain, currently focused on the
23		23	music industry.
24		24	MS. DAVIS: Hi, I'm Cheryl Davis. I'm the
25		25	General Counsel of the Authors Guild.
	186		188
1	PANEL DISCUSSION: LICENSING/MONETIZATION	1	MR. HUEY: Hi, I'm Dick Huey. I'm the Head
2	MS. ALLEN: So we're going to turn to the	2	of Partnerships for Jaxsta, and I'm going to show you
3	next panel on monetization and licensing. I will need	3	a demo.
4	just a minute to set up a demo from Jaxsta with Dick	4	MS. NAUMAN: Yeah, great.
5	Huey.	5	MR. HUEY: So forgive me for leaning over
6	In the meantime, I will go ahead through a	6	while I'm doing this. What I want to present today,
7	little bit of an introduction of two of the panelists.	7	I'm going to do this quickly. Because some of you
8	Vickie Nauman, our moderator, who already spoke	8	have seen this before. Our official Music Credits
9	earlier today. She is from CrossBorderWorks.	9	beta preview, it's a product that's not launched yet,
10	(Pause.)	10	will be launching in the first half of this year. It
11	MS. ALLEN: And Ken Umezaki also presented	11	has the support of three major labels at the moment.
12	this morning. Hello, welcome.	12	The data deal is concluded. The idea is to present
13	(Pause.)	13	the first ever official music credits platform.
14	MS. ALLEN: Okay, I think we're ready.	14	So the idea behind this is in contrast to
15	Vickie, over to you.	15	the other solutions that are out in the marketplace,
16	MS. NAUMAN: Excellent. Thank you,	16	which many of which are user-sourced, to actually take
17	everyone, for staying awake through all of these very	17	data feeds from the music community, both from sound
18	detailed panel discussions, and now we're going to	18	recording owners and publishers, from PROs, to
19	have yet one more. This is on licensing and	19	duplicate them and assemble them into one database and
20	monetization.	20 21	then present that as a sort of IMDb for music. So here's what it looks like. We allow the
21	I would like to just set the stage of saying	21 22	search of music, according to a number of criteria or
22	that we all know in any kind of licensing between the	23	by organization, so that could be a publisher, that
23 24	licensor and licensee there is always tension because	23	could be a label, by performer, or by participant,
25	one side wants the most money and the other side wants the best deal. So there is a natural tension that	25	music industry participants, so producer, engineer,
23	the best deat. So there is a natural telision that	23	maste masser, participation, so producer, engineer,

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mastering engineer, band member. You can type in any of this information in the product and have a result in return.

We'll look at the artist tab. So the basic idea here is to be able to present information in a friendly user -- I guess in a user-friendly way, but then also to be able to drill down further and explore music and sort of explore the provenance of music.

So let's start with David Bowie. So the basic idea here is that I can go in and I can look at David Bowie's catalog by album, for instance, or by single or by recordings. I can present the information in a number of different ways. And I can also look at relationships. This is one of the really fun and exciting parts of this project. So if I click on collaborators, I will see all the entities who are associated via the actual liner notes with David Bowie in one capacity or another. And I can click on any of those and drill down further.

I can also look at a presentation of news. So this is scraped news from a specific variety of sources related to David Bowie. And then I can also look at award certifications. So I can look at RIAA Gold & Platinum and the full history of the Grammy Awards.

MS. NAUMAN: Thank you, Dick. (Applause.)

MS. NAUMAN: So let's talk first about the creator and where the individual creator sits within your purview. A lot of the times who we license the data from, that's the rights holder. But maybe, Cheryl, we could start with you and just talk a little bit about the Guild and who you represent and in what manner does the actual writer have a role in your org.

MS. DAVIS: Well, I'm very pleased to be here representing the Authors Guild, which is an organization of approximately 10,000 professional authors, which is currently partnering with New York Public Library to develop a rights holder author data program, as Greg Cram mentioned earlier today. And essentially our mission is to support working writers. We advocate for the rights of writers by supporting free speech, fair contracts and copyright.

As part of that advocacy, we will be issuing our updated model trade publishing later this year, and we have listed a number of legislative priorities for 2019 on our website, some of which request changes in the copyright law to reflect the authors' changing needs in the digital marketplace.

In our 2018 income survey, we learned that

Go back to catalog. If I pick an album, let's pick Blackstar. This is how we are surfacing the information. So you'll see that not only do we have a track listing and an ability to play, and by the way, two things I should mention, any of the links, audio links within the product or affiliate links, we're not actually licensing music for this and we're also not displaying any splits information. So we're not a payment solution. This is showing off the actual information related to the project. And then we have all the provenance of the music.

So where Sessions, for instance, would be very early in the process of the creation of music, we're a little further on in the process. So we're after the labels have already received and the publishers have already received data and that are pushing that out. We would be one of the entities they would push it out to.

So there is all the information. And I can go further as well and drill down directly to the track level and see lyrics as well as the specific provenance of this particular track. And that's it. I wanted to keep this quick. So now, you've seen Jaxsta and look for it in the first half of this year. Thanks.

the median incomes of all published authors who answered our survey, who were surveyed for all writing related activities, was \$6,080. That's annually. Down 3 percent from four years ago. This is down from

5 a \$10,000 median income in 2009, which is already not that great. More book authors, even those who

7 consider themselves full-time writers, and that number 8 is shrinking, are forced to hold down multiple jobs to 9 earn enough money to survive. This includes authors 10 who have written books for decades and have been 11 fortunate enough to be able to survive on their

writing in the past.

Even though this is the case according to our income survey, some authors are still thriving

our income survey, some authors are still thriving in this current marketplace, and a good number of those are self-published. According to our income survey, self-published authors were the only group to experience a significant increase in income. However, self-published authors, as a whole, still earn 58 percent less than traditionally published authors in 2015. So it's not a fix for all the many changes in the current marketplace.

Two of our key goals as a Guild are to create community and fight for a living wage.

Obviously, the writing community and writers' incomes

have been greatly affected by what's going on in the digital marketplace. Two major changes have been the increase in self or hybrid publishing and the need for libraries to get access to digitized versions of older works, which is why we're working with New York Public Library.

22.

The rise in self-publishing is due in large part to the relative ease of it. Any author can essentially enter the digital marketplace these days. And when publishers decide to stop exploiting the traditionally published work, which may be around two or three years down the road depending upon the popularity of the work, authors can sometimes -- I say "sometimes" because being a lawyer, I have to have disclaimers in here -- depending upon the contract, et cetera, can sometimes recover rights and reissue their books digitally, for example, through the Authors Guild Books-In-Print Program.

Vickie, your statement about the importance of the connection between the artist and the audience in the music industry is becoming ever more important in the publishing industry, especially where self-published works are concerned. Because of the prevalence and desire of authors to release their own works digitally, reversion of rights to the author has

Ken, you mentioned STOLAR in the presentation earlier and he controls all of his rights, sound recording and publishing. Is that correct?

MR. UMEZAKI: Apparently, that's correct. He's actually working towards a publishing deal right now.

MS. NAUMAN: Okay. So talk a little bit about your platform because I think blockchain is -- because of the decentralized nature and because of the permanence of data, it does lend itself to the self-published and self-released artist who wants to be an entrepreneur and not spend all of their time managing their ISRC and ISWC codes, but rather creating music. So talk a bit about where the individual artist fits into that blockchain.

MR. UMEZAKI: Sure. So we gave the example. We showed a video earlier which kind of describes him. He is a performer as well as a songwriter for his own works. He also writes and cowrites with other songwriters as well. So he has sort of multiple personalities, which I think Peter talked a little bit about earlier as well.

So for him and his management company or management team, it's really, really important that

become even more critical these days and clarification of Section 203 -- we've asked for clarification of Section 203 to allow authors to get early termination of their publisher licenses. That is one of our 2019 legislative priorities, to pull back from the concerns of the single author in the digital marketplace and working with the NYPL to collect a collective platform.

Bill Colitre mentioned earlier that individual authors right now are left without a means to identify themselves in their works, and that's exactly the gap we are trying to fill here. We're reaching out to others to assist us in this effort. Where rights are owned by publishers or where there's uncertainty, the Guild is reaching out to publishers to try to collaborate with them to clarify those issues on behalf of our members. Ultimately, we would like to have a platform where authors cannot only identify their work and license it to libraries, we would like for them to benefit from an e-commerce platform in that way. We need partners to help us develop that platform, including people who write the software to create a usable identification licensing platform. We are writers; we are not coders.

MS. NAUMAN: That's amazing.

they essentially don't lose track of the work as it sort of flies through the digital world. And I think that's a pretty representative example of a songwriter's sort of dilemma, which is, as some people have put it, there is no surface from which I can ensure that my association with the work that's out -generally in the music world, it shows up as a recording. So as a composer, you're actually one step removed from the thing that's flying around the universe. So it's twice as hard if you will. So I think that's a pretty common dilemma.

I think as the independent music community has grown and will continue to grow and as sort of the ability to create music becomes cheaper or easier and the connections to the globe on the consumer side gets bigger, we talked about the global music world, I think it's even more relevant that the surface exists.

Where I think the blockchain -- well, there's a lot of solutions. A bunch of them have been shown today. So I think it's really fascinating to see the different approaches that are being thought through and experimented with. Where the blockchain fits into this, potentially, is at scale, it does actually allow for the broadcast of this information and for changes to actually be recorded. So when

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STOLAR, for example, ends up in a publishing deal, half of his rights are essentially assigned to the publisher in the way a typical songwriter deal would work, for some period of time after which it reverts.

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So that type of contractual arrangement can actually be essentially broadcast immediately as opposed to STOLAR or his management team having to go through CISAC over here and BMI over there and notify Spotify somehow, which, you know, as we know -- some of us know is rather complicated. I think there is stuff like that around efficiency of association of the media, the data, that I think is -- could be very empowering to the individual artist community.

MS. NAUMAN: And with both of your statements, I think it's really fascinating because in the world where revenues are flowing, and they are flowing in micro payments and it's a machine-readable world, you have metadata and you have a small payment, and when you have a change of ownership or change of control, over that work, that is also where, very commonly, things end up in suspension or they end up in some sort of conflict resolution, which is one of the ways that money kind of spills out of the value chain.

Dick, I can't imagine an artist, writer,

certainly of crucial importance to really any record label or publisher, and that has been, if not completely addressed, at least it certainly is at the forefront of everybody's mind with such a large percentage of revenue coming from digital sources.

Now, the challenge is, how do you incentivize those same entities to go back, you know, before iTunes for instance, and fill in all the rest of the data. So many of you have probably worked at labels or publishers. You would know, as I do -- I worked at the Beggars Group for about six years, running their new media -- things like artist images, bios, et cetera -- they're not all in the DDEX database. They're not all in an easily transmittable form to get that information out into the world. And even if they were, there is no particular incentive for labels or publishers to do it, I mean, other than it would be a great thing to have all this information in one place.

So what Jaxsta has done -- and I'm going to get around to the back of your question in about one second here -- what Jaxsta has done is incentivize that by when we feed this data out via an API to, for instance, a digital music service, the monetization of that is shared back with the data creator. So to the

producer, mixer who wouldn't absolutely be thrilled that Jaxsta has organized all of the contributors.

MR. HUEY: I haven't found one yet.

MS. NAUMAN: Exactly. So talk a little bit about that. You have to license from the entities, the labels, publishers and PROs that have the data, but this has to be something that all those rights holders are also considering the importance of taking what essentially used to be liner notes and making them into a searchable, browsable database.

MR. HUEY: That's true. And it won't be any surprise to anybody in this room that the transition from physical media to digital media, which started in the late '90s, but really took off with the advent of the iTunes Store, just really left the liner notes in the dust. There were a number of products that sort of sprung up to fix that, Discogs, Wikipedia and MusicBrainz. Again, many of you in the room know the individuals that were involved with those very worthwhile initiatives. But most of the emphasis around metadata was around transactional metadata. So the music industry had to get that piece right first, and that's what everybody focused on.

And the challenge for the music industry has been, okay, now that transactional metadata is

extent it was a label or an artist individually who created the information, part of the money that we generate from that sale goes back to the creator.

That's something brand new. That hasn't happened before. And, you know, it's egalitarian in the sense that it applies to everybody. So that incentivizes this problem of how you get somebody to monetize assets that aren't really transactional in nature.

And that's one of the reasons -- now, finally getting to your question -- that's one of the reasons why producers and artists and entities that are sort of at the start of the value chain are really excited about a product like Jaxsta because not only does it provide attribution in an area that today has been pretty weak, certainly in official attribution, but, also, it creates a revenue stream on top of it.

So the answer is yes, and I have yet to meet a producer, in particular, who has not seen this product and wanted to become an ambassador for it.

MS. NAUMAN: Well, that's a great segue into the value chain because if we think of the creator at one end and the consumer at the other end, there's a lot of people in the middle, a lot of entities in the middle. Clearly, distribution for all media types has

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been disrupted because of our connected world. But talk a little bit about your views on licensing and monetization and how that value chain for each of your respective industries has really changed.

And, Ken, maybe you could talk a little bit about this with regard to blockchain because in the world where we have kind of built industries around these physical objects, a book or a CD, and that everything was geared toward that, the entire value chain was set up around how to create a transaction at a brick and mortar, you're operating really a few rings out of that. How have your conversations evolved with stakeholders in the value chain?

MR. UMEZAKI: Sure. So we not only work with independent artists, but our primary sort of client base is actually the larger content owners and users, so the licensors, licensees that I think many of you in the room are very familiar with.

Again, in the video I showed this morning, for one of the major publishers and one of the major label groups, it was actually looking at two problems and trying to reevaluate at a very high level. The first one is recognition that cleaning our own data, just our own data, is insufficient in this democratized or disrupted consumption world.

you're a DSP today like a Spotify, if a piece of music changes hands, meaning it goes from one label to another, the old label needs to take that down -- that's the traditional practice anyways -- and then the new label needs to put it back up. Same metadata except for, if you will, the P line, for lack of a better summary.

Now, there's lots of mechanisms within many of these organizations to actually deal with that in a pretty efficient way. But we have been speaking to some of the DSPs about their willingness to try out a more comprehensive data set that's essentially innately dynamic or innately updating to actually sort of shorten that time.

So I think there are sort of both operational benefits, for lack of a better term, that people are looking at in sort of this type of solution, as well as this general understanding that I think by collaborating on data we can do a better job of getting the right data and, therefore, the right attribution and the right payments and all that kind of stuff.

MS. NAUMAN: Yeah, it's --

MR. UMEZAKI: That might have been apple-pie at some level, but that's kind of what I'm hearing

MS. NAUMAN: Meaning universal cleansing their own data isn't enough because it goes into the wild.

MR. UMEZAKI: When it goes into the wild -- and as most of us know creative IP in a music sense is actually multiparty almost inherently because there's a composer and a performer at a minimum and we just talked about how there are four or five actual composers for a pop song these days, et cetera. I think because it's inherently multiparty in nature, there's a very, very good chance that the other side of your information belongs to or is the responsibility of someone else.

So a major label here may have all ten big publishers involved with their recorded work, so recognition of that. So therefore, the idea of somehow figuring out a safe place without ruining the control of ownership versus data, a safe place to actually collaborate on that -- I think that's one of the things that the people that we're working with look at.

The other side, which is the licensee side, has a sort of spillover benefit to this. The best example, which I was speaking to someone about earlier today, is actually on takedowns and reposts. So if

from my seat with the people that we're working with.

MS. NAUMAN: And it's fascinating listening to you talk about it because of the takedowns that it almost does harken back to the old days of, you know, there's records on a shelf and there's a physical good that has to be removed and replaced with a different physical good, even though the sound recording is exactly the same, all the metadata is exactly the same except for that one field. It seems like technologically we should be able to address that one field in a different way.

Cheryl, with your work, I would imagine there's probably a lot of running interference and helping authors understand how the value chain has changed, who's their advocate, who are their retailers, where are they going to extract value out of that. Talk a little bit about bridging that gap between the old world where there still are books sold and this new world of digital books and self-publishing.

MS. DAVIS: Well, one thing that we've found a little reassuring, in terms of old-school people like me who still like books, is that people still like books. Millennials are out there buying hard copy books. So to some extent, the 20th century, 19th

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century, 18th century model of you print a book, you put it in a store, you sell it, still does exist to some extent.

However, the fact of the internet and the digital marketplaces change the way people buy books. There's no way around that. Even if people go into bookstores and find books that they like, odds are they're going to go and order it off the internet. It's also very different in terms of shopping for books because on the internet, e-commerce websites can steer you to a particular variety of book. I mean, on Kindle, you see that customers who have bought this book also bought these books. It's kind of targeted as opposed to when you go into a bookstore and you can look around and browse.

And one of the things that we've been dealing with our members about in terms of the self-publishing area is the need to go out and market your own work. Even though publishers are doing less marketing for non-bestsellers these days, they still do some level of marketing. At the very least, they put your book into their catalog, they take the catalog to conferences and that has a certain marketing value.

For those authors who are either self-

that. You don't have to go hybrid publishing to get assistance. You still retain the services of a professional company that will help you put together who is going to design your book cover, who is going to format your book, who is going to put it in the appropriate e-formatting for you. You can hire people to help you do that. But if an author wants to make a practice of self-publishing, then we recommend that they learn those skills. And we have webinars and people to help to do that.

MS. NAUMAN: That's fascinating because that's very parallel to music. And I think in the early days, everyone talked about how there is no use for labels anymore, there's no use for publishers, no one is going to need any middlemen anymore. And that has been -- that has just been proven false. There is a purpose to the teams that labels and publishers have assembled to have someone who can market and someone who can help release and create the artwork.

But what has happened in music is that there was this myth of the DIY artist who was doing everything him or herself and now it's evolved into an unbundling of the services that a label would traditionally offer into small teams that have the appetite and the knowledge to be able to work with

publishing first off or who have had their rights reverted from traditional publishers and are now self-publishing, they've got to take on the burden of setting up their own website, setting up their own marketing, getting their own audience out there for their books, and we have a number of websites -- we have a number of webinars come, excuse me, and presentations that we do on precisely those topics to help educate our members on what this new marketplace is and how they can best benefit from it.

MS. NAUMAN: Do the writers whose work has reverted to them, do they tend to have a team around them that are helping and doing marketing or is this truly a DIY?

MS. DAVIS: It truly depends upon the writer. Particular genre writers have teams out there. Romance, I believe sci-fi, I think erotica, are some genres in which there are authors who have this immediate connection to their audiences. And they do a lot -- they have a very significant brand identification. They do a lot of their own marketing. They've got this all down pat.

People who are new will often take perhaps the hybrid publishing route where you can go to a hybrid publishing house and get more assistance with different artists and light up their catalog and help them take care of all the business side of it.

And, Dick, you talked a bit about how the value chain is changing and how Jaxsta has been perceived by rights holders. Talk a bit about just the user experience of bringing all of this back together. Is that something that creates some fear of rights holders of loss of control of their data, or is it something that they see as empowering and reflecting the artistry of the works they represent?

MR. HUEY: So that's a great question and I'm glad you raised it, Vickie. Really, I think to start that conversation you need to look at the different data pathways, if you will, from the rights owner, whoever that is, through the system and sort of winding up at the DSP, for instance.

So the data channel that Jaxsta is working on is very much additive data and it's very much outside the flow of the actual rights information. So if you think of it maybe as layers, at the top layer, you have your rights information that would flow directly from label or a publisher to DSP and back. So music is consumed, information flows back, payment is effectuated. That's sort of the top level of it.

Then below that level sits another element

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of it, if you will, where some of the same information is flowing down to a company like Jaxsta and being deduplicated without the rights information because we're not collecting rights information. Information is added to it.

We're assembling other information, like artist images and bios, that are not currently part of the transactional space at the top, and then sort of adding that all in, if you will, sort of at the end of the pipeline, which then winds up or could wind up in a digital music service interface, it could wind up as part of the process by which playlist choices are determined, it could wind up in voice-activated services. So it winds up in the output, but it's actually separated from.

Another interesting part -- and I hope I'm not stepping on the question that you're going to ask in a minute here -- but I have an interesting perspective on this whole process of licensing because I wear a couple different hats. For those who know me, you know that I have a couple different engagements. One of the ones that I have besides Jaxsta is being the front line sort of digital licensing person for Merge Records. So I get to sit on both sides of the table to some --

possible.

I can tell you right now the most efficient way possible is not going individually to each record label and each publisher. I mean, you don't have to think about that too hard. So there is still a lot of tension in the marketplace and there are entities like, on the independent end of things, Merlin that are changing the equation, but have not changed it totally.

So you know, it's easy to look at an entity like Merlin as an entity that can sort of fix everybody's problems. Oh, great, there's a central place that everybody can go to to license from. Perfect. You don't have to do individual deals with 800 different record labels. But it is more challenging than it. It's not -- first of all, Merlin is a relatively small organization. And it's not a compulsory -- you know, you're not talking about a compulsory license. You're talking about needing to have a push from the licensor base that sits behind Merlin.

So that interjects attention to the marketplace because entities come to Merlin expecting to be able to just sort of say, here's my project, can you please present this to all your members. And it's

MS. NAUMAN: So you're negotiating with yourself for Jaxsta.

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MR. HUEY: Exactly correct.

MS. NAUMAN: I see no conflict there.

MR. HUEY: You know how that went. Yes, yes, great. If only it worked that way for the whole music industry, it would be great. But what's interesting about it is seeing the -- and I was thinking about some of what we talked about before the panel about sort of the friction that's happening inside the music industry as far as licensing is concerned, and I really do see this from both sides. Because on one side, I feel like I'm part of the friction.

You know, we have a small record label -influential small record label that gets a lot of
deals thrown at it, and there is always a tension
between getting those deals done and trying to focus
on the deals that you think are going to generate some
realistic income. And then on the other side, there
are startups, like Jaxsta, who are trying to access,
for instance, the entire metadata output of an
industry, the music industry back, and in order to do
so are trying to do it the most efficient way

actually the other way around. You need to present it first to the members and get them to push Merlin to do this. So there's a lot of tension still in this space that is problematic still.

MS. NAUMAN: And on the licensing and monetization, for all three of you, you know, the business models of yesteryear of, you know, selling a physical good at a retail price, there's wholesale, retail, the money passes back, there were some standards and some basic norms around how much a consumer would pay for a book or for a CD. But in all of the worlds that you're operating in right now, you're kind of having to make up how what your revenue model is, what you are pitching to oftentimes a stakeholder that is many, many times larger than you are.

What is the receptivity to creating monetization models out in the marketplace? And, Cheryl, I'm thinking a little bit about, you know, the individual, the self-released author and Amazon. And, you know, is there always just price pressure on the consumer side to offer the free or the lowest price possible, but yet the creator always wants the most they can because it's their baby? How do you balance that?

MS. DAVIS: Well, there is a balancing process necessary and there are different pricing structures depending upon if you're a self-published and you're going through KDP or you're going through Kindle Unlimited or how you are doing it. There are different sort of price points that you can agree upon in which you get different royalty rates. But there is also the need to bear in mind that Amazon, while it's the 800-pound gorilla -- 800 million-pound gorilla in the room -- is not the only way out there.

For example, we'll have people if they're interested in self-publishing, I'll ask them, what is it that you want to get out of this? If you want to see your book on bookshelves, then you're not going to go through Amazon because a lot of booksellers aren't going to have hard copies of Amazon books available. You might want to go through someplace like IngramSpark, which is going to give you a different royalty rate. If you want medals and public notice, you may not want to necessarily go through the epublishing Amazon model. You may want to, again, go through a hard copy publishing service

So it's a question going back and looking at not just monetarily, but, psychologically, what is it the author wants to achieve here. this double whammy of how do I actually get monetized on that part of the curve. I think that's actually the most interesting part.

And a lot of the work that seems to be being done is kind of addressing that part and that's micro licensing, that's sync licensing. You've got companies like Song Trader that are trading distribution for sync rights. There's a lot of experimentation going on that's trying to address how to better monetize that part of the curve. For them, for that part, I do think technology can be super helpful. It's about making the asset itself smarter about ownership information and, ultimately, allowing those people who own it, but it could be a publisher, of course, it could be an individual, to actually get out there and take advantage of this cast-a-wide-net thing that you can now do with the music.

So that's kind of the approach that I believe. That's where a lot of the interesting tech stuff is probably most useful not up here in the 1 percent of the world, because that's not going to change. I think it's down here in UGC and in the sort of longer part of the tail, if that's helpful.

MS. NAUMAN: And Jim is -- JIM: [Off microphone] Just a quick

MS. NAUMAN: Right. And, Ken -- that's fascinating because it's -- I think everyone in the music industry, especially on the publishing side where we have regulation, we haven't necessarily been able to enable people, except like in a sync licensing world, to really have a free market.

Ken, can you talk just a little bit about, you know, in a blockchain environment what does that look like for monetization?

MR. UMEZAKI: Sure. So maybe not about the chain, per se, but I do think the sort of historical sort of what I call bulk licensing arrangements that a lot of the players actually participate in are here to stay. I actually think of the music as many people do. You've got this kind of everyone wants to listen to what everyone else is listening to version and then you've the long tail, right?

I actually think what is interesting about what's happening is the long tail is where you have almost like a double whammy of an issue. You've got very low payouts. Just pick on YouTube if you want, or anyone else per stream or per spin as I call it sometimes. At the same time, the growth and content, whether it's UGC or formal content, continues to grow at roughly 15 to 20 percent a year. So you've got

question.

MS. NAUMAN: Yeah.

JIM: [Off microphone] Could you draw a distinction between licensing and monetizing content and licensing and monetizing the data related to the content? Is there pressure on you to pay for the data you get and to license the data you get or is there an acknowledgment they are facts that are available to anybody, like a phonebook in the United States?

MS. ALLEN: Can you repeat the question at a microphone for the people in the back? Sorry.

MR. HUEY: Right. So it's a question about sort of the difference between music assets and music data and, you know, how that's sort of viewed from the perspective of -- actually, Jim, would you restate just one more time exactly where you're headed with that?

MS. ALLEN: Wait, wait, wait.

JIM: [Off microphone]. From my point of view, these are facts that you don't have to license because there may be those that you -- from my POV, these are facts that you don't have to license.

MR. HUEY: Right, fair enough.

JIM: Like a phonebook. But there may be those who shake you down and say, no, you should pay

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for this data. It's ours, we own it.

MR. HUEY: Great question and exactly right. So really there are two kinds of data that exist in the marketplace. There is what we refer to as capital D, Data, which are, in fact, facts, the name of a producer, the name of the band members. Those are incontrovertible facts. They're listed on the liner notes typically and they are just information. You can't own that information. You can disseminate it, but you can't own it.

Then there's copyrighted information. So copyrighted information is a little bit different animal. Typically, this might be images, it might be bios. They're generated. They're created by somebody as work product and that, in fact, does have an owner, typically one owner in a territory. And these two things sort of exist side-by-side.

So there are absolutely entities who feel that the data side of the equation, so the information side of the equation that you can't own, because it's assembled in a particular collection of metadata, that they own that. And, you know, for instance, I don't know, salsa music, let's say that you had assembled the world's biggest collection of salsa metadata. Let's say you had assembled the world's biggest

boundaries because there's a database right in Europe, which might well apply to that collection of salsa data. I'm not quite sure what the smallest size of database that it would apply to. So does the metadata from an album, the collection of 12 tracks, constitute a database, right, to which (inaudible) database that was sui generis (inaudible)? I'm not sure how small you need to be for it to be atomic data rather than a database.

MS. NAUMAN: Do we have another question here?

AUDIENCE MEMBER: I should wait for the answer to Paul if there was a question.

MS. NAUMAN: No, go ahead.
AUDIENCE MEMBER: Or was that an observation?

MR. HUEY: Observation.

AUDIENCE MEMBER: One thing I've noticed and it's something -- I've been a copyright lawyer for years now, but I've also worked with the internet community as general counsel to folks that really brought you the internet, and going back in the '90s, we were moving beyond simply IP addresses for information units in digital form. They were called digital objects.

collection of salsa metadata. You might take the position that that database that you've assembled is something that you own and we've heard this theory sort of put out there. And, in fact, you do own the technology underneath it, but the information that's in it is a way more gray area.

MS. NAUMAN: So if you wanted to go and find all of your own salsa information, you could do that. But if you want it conveniently packaged in one data set with consistent and standard fields, there is value to be extracted.

MR. HUEY: Yeah, and there's an element of wanting to treat that collection of data as though it was copyrighted content, which it isn't. But that exists in the marketplace, so there is a tension there.

AUDIENCE MEMBER: Paul just said in the US. MS. NAUMAN: Right. MR. HUEY: Thank you.

AUDIENCE MEMBER: [Off microphone]. (Inaudible).

MR. HUEY: Microphone, do you have a microphone?

AUDIENCE MEMBER: [Off microphone]. It gets complicated when you're working across national

One of our early adopters -- and they are quite important today -- was the publishing when they went from the print on paper, the physical to the digital object. Now, you can have information in all kinds of forms, whether it is a collection, metadata, the actual information itself, if it is represented in digital form as a digital object, generically a digital entity, it's possible in the entity you can have metadata going along with it that actually has the permissions information.

So a lot of the software today and the software systems you can actually have automated programming so you wouldn't even have to go back to a human. So the object itself, if you ingested it, it would know what to do, but there would also be a way to reach out if you didn't have sufficient permissions to do what you wanted to do.

It's a very dynamic area. And I just point this out that it might be something you want to look at because it has a global outreach. There is actually a foundation in Geneva called the DONA Foundation, which is managing this interoperability globally for the system right now. So if anybody's interested, I could provide further information.

MS. NAUMAN: Ken, do you have any comments

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because that is kind of the Holy Grail of --MR. UMEZAKI: Sure.

MS. ALLEN: Could I ask you to give us your name and --

AUDIENCE MEMBER: Oh, I'm sorry. I'm Patrice Lyons, and I'm general counsel to the Corporation for National Research Initiative. The principal, Bob Kahn, and his former vice president, Vint Cerf, did the original TCP/IP. We've been pioneering the digital object architecture, and I'm especially interested because one of our early groups, because I'm a copyright lawyer perhaps, has been in the copyright industry. So I just wanted to introduce that. I thought it might be helpful, because when you talk about data and data sets, they kind of float around. But if you have a concept that could be persistently identified, it could be more helpful.

MS. NAUMAN: That's great.

MR. UMEZAKI: I think in terms of an instance of that that sort of is embedded in our approach is actually private versus permission data. If you think about it, where we're focused on, which is more on the ownership data side of things, it's extremely important that I think two things are real. One is that it has to be from an authoritative source

them as our approach.

AUDIENCE MEMBER: Ken, if you would just permit me just briefly to follow up on what you're saying. It comes out mostly like in the financial industry. If you have a bundle derivative and you identify that as the digital object with all the associated metadata for management purposes, you could have a million different separately identifiable digital objects within it and with various levels of granularity for controls.

So it's possible to have an independent writer working with some group that would manage that, and here's where you get into the software management part, which introduces the element of the derivative work. And so you have to just look at it in various aspects. But I won't go any further.

MS. NAUMAN: I think there were -- I don't know if we have time, but there were a couple more questions.

MS. ALLEN: One more. Bill had advice on something earlier.

MS. NAUMAN: Bill had his hand up. MS. ALLEN: So let's just finish with him.

24 MR. UMEZAKI: Bill, I'm so glad you're

here.

and you have to be able to look at the data set because it's a lot of data at the end of the day and actually try to evaluate how good or bad it is.

Now that's kind of like the wouldn't that be great if we could have everybody do that. The flipside is we also want to reduce friction in the monetization and licensing side of things which means you do need a registry or, if you will, a yellow page like thing where you can at least point to the people that you need to go to if you need to figure something out.

So our approach is that's the public layer of the data, which is so that you can identify all of the relevant parties. And then some of the more important data around monetization, perhaps even licensing, like percentage ownership, you saw that in the video today, would actually be behind this kind of gate, if you will, that would require the owner to provide or owners to provide access to the relevant parties.

So it's a kind of complicated way to explain it maybe, but there is that inherent, if you will, tension between sharing and, if you will, controlling, right, and that balancing act I think the industry ultimately needs to adopt something that works for MR. ROSENBLATT: I made it. No thanks to American Airlines. I'm Bill Rosenblatt from GiantSteps Media Technology Strategies. Dick Huey, you said something that really intrigued me and I apologize because I walked in on the middle of it. MR. HUEY: Sure.

MR. ROSENBLATT: You know, us metadata geeks have various different ways of slicing and dicing the wonderful world of metadata, and the terminology I will use I will not claim to be universal in any way, but we call it discovery metadata, merchandising metadata, as opposed to transactional metadata.

MR. HUEY: Mm-hmm.

MR. ROSENBLATT: And you know many of us have seen various attempts over the years to try and make money off of nontransactional metadata, none of which have succeeded with a couple of exceptions like Gracenote and what have you or arguable monopolies on the market like Rovi.

MR. HUEY: Yep.

MR. ROSENBLATT: How is that ever going to make money for anybody? You know, there's no money in Wikipedia. There's no money in MusicBrainz. Discogs is there for the buying and selling of physical artifacts.

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225 1 MR. HUEY: There's money in IMDb. 2 MR. ROSENBLATT: Okay, fair enough. 3 MR. HUEY: And, I mean, to go right to the heart of your question, so we have a free product, 4 5 which is IMDb. We have a pro product which is IMDb Pro, not exactly, but on the music side. You know, we 6 have access to the same data sales pipeline that 7 8 Gracenote or TiVo does, I think with different focus. 9 Those entities seem to be highly focused right now on 10 interpretive data. So on mood data, for instance, 11 where we're more focused on the actual information 12 itself. 13 MR. ROSENBLATT: But mood data, for example, 14 is something that's going to feed into sync licensing, 15 for example, transactions, right? 16 MR. HUEY: Okay. 17 MR. ROSENBLATT: Isn't that the primary 18 motivation for it? 19 MR. HUEY: Playlists do. 20 MR. ROSENBLATT: Okay, okay. 21 MR. HUEY: Yeah. So there are revenue 22 streams inside this and I think there are -- I mean, 23 we haven't really even talked about voice-activated 24 yet or not much, but that's potentially a huge revenue 25 stream. I mean, it's highly likely -- and Peter

notes. We are running a little behind, but we planned for that. So we are going to start the breakout sessions at 3:35.

A couple of notes on that. There are Chatham House rules, which means there is no identification publicly of who is saying what. What we will have is a facilitator for each breakout session will come up, as we've done in the past meetings, and give a readout generally with no identifying names of who said anything, but just general key points of whatever was said just to share with the plenary. This will be offline for those who are online, so you have a break.

One question that came in from the video audience was whether slides would be available afterwards, and the answer is we have a transcript that will be available afterwards and the video of this will be available afterwards, too. To the extent someone is interested in a particular slide deck, you can contact us and we can see whether or not the individual slide owner is interested in sharing.

And so with that -- I'm at Susan.Allen@ uspto.gov. And with that, we can break for a quick coffee break, but I have one statement from John

Morris regarding the breakout sessions.

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Jenner brought this up -- that we're all headed in that direction sort of inexorably, this idea that there's going to be something around you at all times sort of listening to you talking until it hears a cue word of some kind or another and then tries to answer a question. So to answer that question it has to have the information or it can't answer the question.

MS. NAUMAN: So it's an enabling technology. MR. HUEY: It's an enabling technology, that's right.

MR. ROSENBLATT: Right. But having an answer to that that's just sort of freely available versus having an answer that is verifiably correct and attributable, my question is who cares?

MR. HUEY: The services care for one.

MR. ROSENBLATT: Google doesn't care.

MR. HUEY: We could probably have an offline conversation about this, but I think, respectfully, I would take a different side on that argument.

MS. ALLEN: And with respect to offline conversations, I think it is time for our coffee break. So I do thank everyone here and our panelists and Vickie for moderating.

24 (Applause.)

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MS. ALLEN: I have a couple of housekeeping

MR. MORRIS: I'm up here to discourage you from coming to my breakout session. No, no, I am leading the breakout session on the role of US Government and I understand that a lot of you have expressed interest in that and I'm thrilled, come on ahead. But I do want to make clear that if the only reason you're going to that is to make sure that we're not planning something and going to surprise you, we're not planning anything and going to surprise

So, I mean, we really are interested. We have, over the last couple of years, you know, kind of gotten the message that holding these meetings has been a very productive thing to bring people together. We've really enjoyed this one so far and we'll probably continue to do it in the future. But so, I mean, feel free to come and let's discuss what the Government can do to help, but there are a lot of other breakout sessions, too, that also are interesting topics. So I just want to kind of encourage folks to come if you would like to talk about that, but also feel free to go elsewhere.

MS. ALLEN: Just logistically, we'll have the facilitators at two tables in here and two next door with table numbers so you know where to go.

57 (Pages 225 to 228)

Develo	ping the Digital Marketplace for Copyrighted Works		3/28/2019
	229		231
1 2 3 4 5 6 7 8 9	Those table numbers correspond to the topics on the agenda, so thank you. (Coffee break.)	1 2 3 4 5 6 7 8 9	two areas, both of which represented tensions about metadata. So the first one I want to talk about is the tension between needing to collect comprehensive metadata about people and so on involved in creative work and the tension between that detailed metadata so that you can license and properly archive and so on the work and the privacy implications of collecting that kind of metadata. So how do you, on the one hand, allow people to be anonymous, but on the other hand, respect the
11 12 13 14 15 16 17 18 19 20		11 12 13 14 15 16 17 18 19 20	rights of creators without them necessarily being identified? We talked about a lot of different things to do with that, but we came up with a slight laundry list of possible ways forward for that, including crypto for the bitcoin fans out there. We talked a fair amount about what roles legislation and regulation might play in terms of requiring people to register, but perhaps being able to as part of that registration being able to say that they wanted to remain anonymous.
21 22 23 24 25		21 22 23 24 25	We also talked about what would be the incentives then to be able to create that kind of metadata in a way that protects people's privacy. We felt that a couple of things. One is market pressure. So if there is large organizations that are requiring
	230		232
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	AFTERNOON PLENARY DISCUSSION MS. QUIGLEY: If we could take our seats. All right. Good afternoon, everyone. My name is Linda Quigley. I'm a copyright attorney with the USPTO Office of Policy and International Affairs. Technically, I worked with Susan Allen on putting this program together, but I should note that Susan really bore the weight of putting this together and I think she did a good job and I would just like to give her a thank you. (Applause.) MS. QUIGLEY: And she's not even here. We'll tell her about it later. All right. So we're going to move right into having our facilitators present what occurred in the breakout sessions. Lam going to remind Chatham	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	that kind of information, but enabling you to retain your privacy, that would help. And then we talked a little bit about it also would make it easier if we had more interoperable standards that would support exchange of information, but in a way that doesn't require you to de-anonymize if you don't want to. The second set of tensions that we talked about was, on the one hand, the sort of snowballing demand for metadata and more and more kinds of metadata, not just identification of people, but also information to help you discover works or to capture technical information and so on. On the one hand, there is this snowballing demand for metadata, but on the other hand, one of the people on my group described it as metadata is just not fun. So for creative people, it's not their dream to be typing
16 17 18 19 20 21 22 23 24	the breakout sessions. I am going to remind Chatham House rules, so please don't identify any speakers of what occurred, just give us the general tenor of what went on. We're going to go slightly out of order than the tables were labeled. We're going to start with metadata embedding, deleting, locating, and optimizing. Stuart Myles? MR. MYLES: Thank you. So a pretty broad topic, and we had quite broad discussions. Just to	16 17 18 19 20 21 22 23 24	creative people, it's not their dream to be typing information into web forms and so on. How do you resolve that demand for lots and lots of metadata, increasing types of metadata, increasing precision of metadata, and then the fact that it's not really what people want to do? So a couple of things that we came up with there. One is to do with increased automation to make it so that it's easier for people with less work to add increased

amounts and increased precision of metadata, so

quickly summarize, we ended up focusing on two sort of

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meaning creating apps that people can use on their phone or building things into WordPress and so on. And also, again, better standards there to make it so it's easier to have interoperable information that if you enter it in one place, it's not going to get lost in the transmission of the works from creation to publication and beyond.

There were also a couple of interesting things there about creating incentives for people. So somebody mentioned that when people create work and see their own name associated with a work, then that can be a great incentive or an explanation about why you should be putting accurate metadata onto your work. And, also, there was an interesting discussion about how, in some parts of some industries, having a really tightknit community can help with encouraging people to create the metadata because they know that it's going to be used and they know other people are using the metadata and so on. So that seemed like an interesting thing that may be improving standards, creating automation, and encouraging community, and industries could help with those things.

MS. QUIGLEY: Thank you.

Now, Bill Rosenblatt is going to fill us in on an update on blockchain technology.

when you're trying to ingest 30,000 tracks per day and you're a streaming DSP and you're trying to clear all the rights for those 30,000 tracks a day and you're doing 99.99 percent the same job as all the other streaming DSPs, but you have to do it on your own, that's a little bit silly and redundant and leaves all kinds of room for errors.

So the idea of blockchain technology there is instead of each DSP having to do all of this huge job by itself or having to hire some company to do it on its behalf, there can be a common notion of what all this data is and who needs to get paid when what rights are exercised to remove the burden and the risk from individual actors in this value chain.

This is just something that would benefit everybody and there is a notion that if you set up the access rights to data on the blockchain properly, which is a tricky issue, and you come up with another tricky issue, ways to resolve disputes, discrepancies of data given that blockchain is an environment where you can't erase things, you can only add to things, how do you do that when someone decides that the splits on a composition need to be changed or some composer comes out of the woodwork or a catalog gets bought and sold or what have you? There are ways of

MR. ROSENBLATT: Okay, thank you.

So we covered a lot of stuff and I guess what we focused on is potential areas where blockchain technology can help in developing the digital marketplace for copyrighted works. It's an early -- we're in the early days. There are people like Ken Umezaki and his company that are working on solutions. There are others who have ideas about how the technology can apply and there are certainly various startups, various initiatives going on. So I think the most useful way that I could summarize our discussion would be to talk about what the potential areas for applications are and what the benefits would be.

Some of this you have heard from presentations earlier today that, unfortunately, I wasn't able to be here for. So at the risk of being repetitive, here we go. In the music industry, there is a big problem with rights and royalty transaction data. This problem has come to the fore particularly with respect to mechanical licensing for compositions because you've got this track-by-track or recording-by-recording licensing requirement that worked fine.

If you just wanted to do a cover of a Stones song or whatever, you'd go get a license for it. But

doing that; they're just different from the ways that people have historically dealt with it.

So there's a lot of activity around that notion in the music space brought on by the amount of pain that is being suffered from the magnitude -- the growing magnitude of the problems, lawsuits being filed and whatnot. So that's one thing that we discussed.

Another thing that we discussed has to do with kind of zooming out several levels. How do you identify entities that participate in transactions on a blockchain? Companies, let's say. What kind of company do you use for them? Do you use their name? Do you use their DUNS number, whatever? And one idea is to use their domain name because it's all internet business and so they're doing transactions over the internet. The domain name is sort of the fairly straightforward choice to use as an identifier.

So there is a potential role for domain registries to fulfill a function as trusted sources of domain info and entities that can verify the identity and the true nature of a domain rather than someone trying to cyber squat or someone trying to imposter. Is there a verb form of imposter? Imposterize?

Impersonate, thank you. Impersonate a

ou. Impersonate a

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1 domain. I can talk English real good. 2 (Laughter.)

MR. ROSENBLATT: So that is -- you know, if companies are going to do business on a blockchain, how do they identify themselves and who vouches for those identities? Well, in the existing world, you've got public key cryptography and you have things like certificate authorities, and this is very common in the e-commerce world. There is an opportunity to have some rough equivalent of that functionality in a blockchain world when you are transacting and, of course, here we're talking about transacting anything, not necessarily content or rights, but certainly it can apply in this world.

And then, finally, we talked about blockchain applications in book publishing, which we're not allowed to name names, but one of us just wrote an article about this in Publishers Weekly. MR. GRIFFIN: I think I read your article. MR. ROSENBLATT: Did you?

20 21 MR. GRIFFIN: Yeah, I did, definitely. 22 MR. ROSENBLATT: It was published about two 23 days ago.

24 MR. GRIFFIN: It was good, too. 25

MR. ROSENBLATT: Thank you. It was one

Paul, then Paul would own it, and I would no longer be able to access it. And there's a mechanism to make sure that all that happens correctly and that would be a DRM-related mechanism. And the reason why this is of interest in the e-book community is because ebooks, by and large, at least in this country still use DRM. So people expect that to be the case, unlike in other countries such as the Netherlands and Germany and various other places where they've moved away from DRM and so this would not work.

So there are a few startups that are doing this kind of thing and we'll see where they go. It's early. They're just starting out. We'll see what happens.

The two other applications are -- there is a vague notion that blockchain technology can be useful for rights and royalties in the same way that it has been discussed and acted on in music, but the book industry is -- essentially there are a number of reasons why the book industry is not as advanced as the music industry is in its thinking and consideration of these ideas. But the fact remains that the book industry is only just starting to look at this. So no one has really done anything yet.

25 And then the third application in this area

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page. It's easy to read.

Anyway, now that we have broken Chatham House rules --

(Laughter.)

MR. ROSENBLATT: -- I didn't say now that Jim has broken Chatham House rules: I said now that we have broken Chatham House rules.

MR. GRIFFIN: I'm going to break more Chatham House rules here.

MR. ROSENBLATT: All right, there we go. Jim is ready to go. So there are essentially three areas that the book publishing industry, at least that one of us is aware of, has looked at for blockchain application, and the area with the most entrepreneurial activity is in e-book distribution on the blockchain. So the way this works is a publisher or an author wants to sell copies of his or her ebook. So when you buy one, you aren't buying it under Apple or Kobo. You are essentially getting more of a simulacrum of ownership of that e-book. You get the right to resell, to lend, to give away, too alienate, among other things. And the author has an indelible

a license agreement as you would on Amazon or Nook or

record of authorship that cannot be changed.

If I were to sell my copy of the book to

print on demand technology and --MS. QUIGLEY: Bill, we have two more to go,

so --

is to take advantage of the lowered cost of POD or

MR. ROSENBLATT: Okay, so I'll finish very quickly. So to basically use a form of anticounterfeiting technology to do piracy track and trace on a blockchain instead of through a centralized database owned by a single counterfeiting detection vendor, that's an interesting area in book publishing. And I will stop there.

MS. QUIGLEY: Thank you very much. Now, Jim Griffin with voice recognition technology.

MR. GRIFFIN: Yeah, we had a good discussion, a focused discussion, there weren't that many of us. I blame John Morris for inciting the audience to engage in government insurrection, and he drew quite a crowd over there that I was envious of. But we had a very high-quality group and I'll tell you that right up-front.

We noted the growth of voice interactive devices and their new role in society. We discussed how there were 10,000 people working at Amazon on voice interactivity alone, 100 million Amazon devices

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241 as a billion

installed around the world. Google claims a billion because they include their software installs only. There's certainly a lot of activity.

We took note of surveys that showed that those with the devices, 90 percent of them say it has come to dominate their music listening. And they're not in the car yet. So they're coming to the car this year. Amazon has a program that will let you sign up to be one of the first. I signed up. They didn't give me one, but I bought one separately for like \$17. It works fantastic. So we discussed their arrival in the car and how that might change things coming into the future.

Clearly, there is growth in this area and there is a lot of competition with Microsoft, Apple, and others competing. If there is one winner, there will be antitrust issues ahead. We didn't talk too much about that, though. We spent most of our time on the issue of string contention, on the idea that what is triggered in a voice interactive conversation with the technology is what's called an utterance, and an utterance is essentially the equivalent of a domain name in this world. If someone has an utterance, if they've registered that utterance with Amazon, no one else can register that particular utterance on the

whether there were property rights in the ownership of an utterance, much as if there were property rights in a domain name. And one particularly skilled Commerce Department attorney -- again, we are under Chatham House rules -- pointed out that I should read the terms and conditions at Amazon, that I had probably already given that up. So that was quite smart.

We moved on a bit past its impact on the media field. We thought somewhat about privacy and people's concerns about privacy. We thought about the public policy implications of "send me an ambulance, send me a fire truck, send me the police department." Which police department does it go to, which fire department does it go to? Does the Government have an interest in that?

And then we quickly concluded with one old reprobate with a British accent -- and I will not go further with that -- asked if you could summon a prostitute or pornography with Alexa.

(Laughter.)

MR. GRIFFIN: And at that point -- and I will break Chatham House rules -- Susan Allen suggested the time for us to assemble up here was now. (Laughter.)

MR. GRIFFIN: So we came here quickly. And

public level.

So the idea of a race to be the first to own a utterance -- so for example, if you were to say, Alexa, how much money do I have in the bank, only one bank could own that at least at the beginning, and there would then be a submenu status where you had to say, ask PNC how much money I have in the bank and you would have to add something else and that would delay you a bit and be a second mover thing that -- and so on down the list that would lead to essentially the resolution of string contention.

This is a lot like domain names except tougher because if you give me 100 law firms, I can give them 100 URLs that will get you to the 100 law firms, but only one can own "Alexa, tell me how to register a copyright." When I asked Alexa that, she said I didn't know anything about it. So I personally went to the developer portal to register a skill around how do I register my copyright, and I immediately felt guilty that I was taking it from its proper owner, the Government, and I called a few people at the Copyright Office and said, look, if you try to do this, just let me know, I'll give it to you.

And it is a place that we can go and it can work.

I think what we began to question was

that is a full report from the fourth committee on voice interactive. And I will remind you that these things are not just voice-interactive audio devices. They've gone to video now, too. But their impact in the car is audio devices. I have one now in my car. It's huge just that I don't have to take my hands off the wheel or look somewhere else, but I can summon music. It's terrific, and I can see why it will come to dominate the audio listening space in the future.

MS. QUIGLEY: Thank you very much. Now, we're going to hear from our Pied Piper, John Morris, on the role of the US and other governments in facilitating online licensing.

MR. MORRIS: Well, I've just added something to the listing that we're going to need to start an investigation, Jim Griffin, you know, taking things --

MR. GRIFFIN: Please do.

MR. MORRIS: -- from the Copyright Office. All that stuff.

MR. GRIFFIN: I would like it if there were just one government group investigating me, so I encourage that.

MR. MORRIS: So I have had the good fortune over the last -- this is the third meeting I've had the good fortune to work on the issue of government,

the role of government in each of the three meetings, and it's been kind of an interesting evolution.

I think the group that we had agreed with what we've heard every time, which is that this type of meeting is a very valuable exchange and, you know, I think it's particularly valuable to have the different stakeholders who hadn't been here before in terms of print -- you know, some of the print authors and the like. So that was certainly still a consensus. But it's also interesting that I think that the conversation we had, you know, perhaps suggested there may be a point in time where the government could be helpful in some other ways.

One of the conversations -- a very interesting conversation that a number of the participants in the conversation, you know, were fresh off the MMA tussles and conversations over the last few years, and they were kind of reporting that in that process the Congress and the Government, in general, you know, what they often did was to force the stakeholders to go back and try to work harder to work it out, to work out their differences, to really come up with a unified set of requests or needs that perhaps Congress could help.

And that kind of led in part to a

in conversations early on, not only just the rights holders and technology platforms, but also users and advocates for users, public interest organizations, and just make sure that -- you know, I think in the MMA, there was a lot of agreement, but then some of the holdups were -- you know, could have perhaps been avoided or some of the delays could have been avoided by getting people involved in the conversation a little bit earlier.

There were some assertions -- and I'm not going to pick any names -- of, you know, there are still some power imbalances. Three music labels really kind of think they control everything, but, of course, there are lots of artists who are not affiliated with those music labels and, you know, we need to kind of make sure -- you guys need to make sure that solutions can also work for folks who are not with the most powerful of the companies.

You know, a brief conversation of Article 13 or what used to be Article 13 in Europe, and I'm kind of putting aside the question of whether, you know, that's a good thing or a bad thing or whether it went too far. There is one observation that -- you know, that it's interesting that it really kind of forced both the technology platforms and the rights holders

conversation about what could the Government, short of legislation up on the Hill, you know, can we help in helping stakeholders get through some difficult issues? So is there an opportunity for the Government to host a meeting, not as general as this, but a more specific meeting that helps to shine a spotlight on a particularly difficult issue that private stakeholders are not yet -- I mean, there's a lot of interest in getting over a hurdle, but they haven't yet really gotten over that hurdle.

So are there issues where, you know, a government-convened meeting could help to shine spotlights or to help break logjams? I am not here to announce we have something in mind and we're going to host one of those meetings; I'm actually here to encourage all of you to think about that possibility as you go forward. And to the extent that, you know, you actually think that there may be, you know, see if other people agree and certainly come back and talk to us in the future.

You know, there were some then specific discussions about, well, how to make some of the cross-stakeholder conversations more effective, more efficient. One of the proposals simply was to make sure that the full range of stakeholders are involved

to really collaborate in both directions and, you know, is there a need for that in some circumstances? Again, that's really a question for you guys to think about.

And then the final last couple of points, a discussion of interoperability. You know, that's obviously a very desirable goal, to have as an ecosystem and certainly there are some circumstances where the Government can be useful in seeking interoperability. I can kind of think of a few possibilities. But, again, it's really kind of an encouragement to all of you. You know, if there are real interoperability problems that you see not getting resolved, come talk to us. Maybe there is something that we could do.

And then my last point to read out is actually not a readout of the conversation that we had just 20 minutes ago, but a readout of the exact same conversation we had a year ago. Because it was a point that wasn't the focus of our conversation here today, but it really was underlying a lot of the points that were made. It was a big topic a year ago and that's the international kind of angle that, obviously, folks in the room -- and many of you are not from the United States, not focused only on the

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United States, but to the extent that there is value or a need in trying to get interoperability around the world or, you know, just kind of the ability of things to sync up, governments are, in fact, pretty well placed to try to discuss the issues with other governments.

So again, that's really more a request for you to think about if, as you continue to work through these issues, if there are things that a government or the United States Government coming in and trying to promote solutions that work in other countries as well, you know, that's certainly something I think that we would be very interested in hearing from you about. So that's really kind of the quick readout that I have from our group.

MS. QUIGLEY: Thank you very much.

Now, I would like to put it to the floor for any questions for our facilitators. Questions about what you've heard on the readout or if you have comments on anything they said. Anybody?

(No response.)

MS. QUIGLEY: Well, I'm going to ask a question. So I'll keep you here for just a little bit more.

One thing that came up at the table that I

acceptable. You've got to go.

And I'll just fast forward through that. Today, it's the same thing. A CFO says, our corporate data is not going to other companies, we're not sharing that data. Now, the internet one obviously fell. People saw the advantages of interchanging email between companies and industries and sharing communications and having a facility for using TCP/IP and others to route data between companies.

So while I don't think that the blockchain is going to make a huge difference short-term, because I think those feelings are strong that our data is our data and we do not share it with other companies, but that Walmart guy coming out and saying, the future of our company is sourcing quality goods at good prices and willing to interchange data with others like that, that tells me it's coming down the road, that others will see the advantages of interchanging their data.

MR. MYLES: I guess what I would say is that when it comes to things like the blockchain and other technologies, it's actually misleading to think that there are different industries. What I mean specifically is that the idea that there's a music industry versus Hollywood versus news versus radio and so on, or versus cultural heritage institutions. In

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was at was we discussed how blockchain was being used in different industries and how it was at a different point in those industries in terms of its adoption. Did that come up at any of the other tables and is it helpful to our discussion to find out what is happening in other industries?

MR. GRIFFIN: Well, I'll say I think it's critical that we look at that. My own feeling about blockchain was absolutely changed when I heard that the head of marketing at Walmart walked in one day and popped an apple down on a table and said, I bought this at a gas station and I want you to develop a program where I can find out where any piece of food I put on this table came from. And I thought here's a guy who gets that Walmart's future depends upon being able to source quality goods from all over and that he's willing to put their stuff into the database in order to get everybody else to put their stuff into a database that would bring his company great advantage.

And I say this because this particular issue I feel like I've lived through. I arrived at Geffen Records in 1991 and they were outraged that we put in an internet connection. Outraged. And, in fact, the parent company was furious. We do not connect our corporate network to other networks. That is not

fact, from a technological point of view, all of those different industries are really trying to solve very similar problems and also we all interact with each

So is it important to try to coordinate between the different industry uses of things like blockchain? Yes, I think it's necessary because, otherwise, you'll actually entrench problems between them.

MS. QUIGLEY: Okay. I've got the mic. I'll give it back.

I'm actually going to the blockchain meeting in Madrid. They have this focus group for ITU on it and I've been following it for the last couple of years because a block essentially -- back in the '90s, there were 50 companies in the United States that agreed containers, packages, blocks, IBM had Cryptolopes, they were all kinds of digital objects. And the management of the digital object architecture grew out of that.

Now, the particular way of configuring it, there are multiple ways of configuring what they call a blockchain, but essentially from an interoperability perspective, there are all types of digital objects, more generically. So I'm saying in the copyright-

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Developing the Digital Marketplace for Copyrighted Works

dependent industries, the early adopters were in the publishing industry for the DOI. They developed their system. There's now the EIDR, which is very, very helpful I understand.

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So, yes, there are different ways of doing it, but I guess it's mostly an awareness of what the basic technology is that I think you're advocating here, which is good.

MR. ROSENBLATT: So as someone who actually was involved in the creation of the DOI system with CNRI, that's an interesting observation. You know, the DOI was the -- it's a bit of an exception in the sense that the book and journal publishing industries under the aegis of the AAP, which initiated that activity, operated under the self-delusion that they thought of it first. They didn't. Your folks did, among others. They didn't. But it was a useful fiction.

> AUDIENCE MEMBER: Can I interrupt a second? MR. ROSENBLATT: Yeah.

AUDIENCE MEMBER: I come from the Copyright Office and I had left and I knew several people in the copyright industry, the publishing industry, who were very concerned about losing their business when things were going digital. They came to meetings at CNRI,

cares about them, they're different, they're not us.

We all need -- that is just meant to be an illustrative and not exclusive description. We all need to do a better job of importing ideas from other industries in order to advance this field.

MS. QUIGLEY: And I think we had one other comment here. One more.

AUDIENCE MEMBER: I guess this is more of a suggestion than a question, but with respect to the role of blockchain within the context of this discussion around the market for copyrighted works, I think if we're going to focus on that or you are going to focus on that in the future, we really need to get the video game folks in the room, because they are actually, in many ways, the most advanced in at least their thinking about actual consumer-facing blockchain applications because last year somewhere between \$50 and \$60 billion worldwide were spent on in-game purchases of virtual goods, which is a huge market obviously, but it's also a constrained market because that virtual good is tied to that game. And once you stop playing that game, your virtual good is worthless.

But there are a lot of people in the game industry right now who are working on separating the

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now that you mention it. First, it was in the context of what we called NoBots, the mobile programs, since I'm mentioning --

MR. ROSENBLATT: Yes. I know that Bob Kahn paper.

AUDIENCE MEMBER: So basically the digital

MS. QUIGLEY: We need to make sure we --AUDIENCE MEMBER: -- the block at that time, it was not that they were the first and that somehow we were the first. No, we were helping them understand the technology that had been developed and they were early adopters. I think I would prefer that way.

MS. QUIGLEY: Thank you.

MR. ROSENBLATT: Well, the point about -the question about learning from other industries, which is what we're getting back to here, is the book and journal industry does a horrible job of this and was only able to do it in the DOI context because it convinced itself that it thought of the idea first. Whenever I raise these issues with book publishing people and talk about how the music industry is a couple years ahead with regard to the rights and royalties aspect of it, they go, oh, you know, who

item, the ownership of the item from the game in which it was acquired using blockchain. That opens up the possibility that virtual goods could become portable across different games or you could develop a secondary market around those items. You know, you don't need it anymore for this game, you bought it for this game, you don't play it anymore, you could trade, sell it on a secondary exchange in a secondary market.

And I think that that model is an important model to think about with respect to the other industries as well. Here I disagree a little bit with Bill with respect to e-books. I think there are a lot of behaviors within the book industry that have been mediated by things like the first sale doctrine.

MS. QUIGLEY: And I'm sorry, we're going to have to cut you off and have you finish that argument at the happy hour. I feel very bad. It's a good day to be a copyright geek. I enjoyed it, too.

MR. ROSENBLATT: I'll talk your ear off on that, Paul.

MR. GRIFFIN: When's the last time somebody told you you should be drinking to have this discussion?

(Laughter.)

MS. QUIGLEY: We're going to let John Morris

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1 do our closing remarks. Th 2 (Applause.) 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	thanks to all the attendees who came who weren't speakers and moderators. I certainly hope that you got as much out of it as I did. And then I want to thank the staff who really kind of made this happen. First, with the Global Intellectual Property Academy, the folks who really kind of did a lot of the logistical work to get this meeting together and pulled together. I want to thank Kortney Hammonds, Jamie Day, John Ward and Teresa Verigan. So thanks very much for all of your help. (Applause.) MR. MORRIS: And I really do want to call out Shira's staff in the Office of Policy and International Affairs here at PTO, Linda Quigley, Brian Yeh and Neil Graham. But, Susan, you avoided Linda's earlier calling you out. So I'm going to specifically call you out to say Susan Allen really was the moving force behind this. And I have been on many conversations with her over the last many, many months as to kind of how would this work and when should we do it and all of that stuff. So I just want to particularly call out and say thanks to Susan, but also all of our other colleagues at PTO. (Applause.)
1 CLOSING REMA 2 MR. MORRIS: The sch 3 minutes for closing remarks an 4 something closer to 15 seconds 5 My main role here is on 6 Perlmutter from PTO and on be 7 give thanks. But I do want to 8 thanks, I do want to just kind of 9 perceive as kind of significant 10 first iteration of this meeting, y 11 discussion was really focused of 12 problems and, you know, kind 13 scope of the problem. And in there was a lot of discussion of 15 ideas and some, you know, beg 16 This time I think there w 17 much closer to operationally pl 18 not kind of sweeping the entire 19 least I think there is progress b 19 mean, I really kind of applaud 20 mean, I really kind of applaud 21 But my main goal is to g 22 everybody here. First, thanks to 23 and moderators and folks who 24 and prepared slides and really 25 of us. It was really tremendous	edule says I have 15 d I will try to do it in behalf of Shira ehalf of NTIA to really before saying f acknowledge what I progress. In the ou know, most of the on identifying the of recognizing the full the second iteration, some prototypes of ginning things. ere things that are ausible. Obviously, ecosystem in, but at eing made. So, I all of you. ive thanks to to all of the speakers have actually come here tried to educate all	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	MR. MORRIS: And that's it. So thanks very, very much. We will end here. So thanks very much. (At 5:07 p.m., the meeting was adjourned.)

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