DEPARTMENT OF COMMERCE

PUBLIC MEETING ON

DEVELOPING THE DIGITAL MARKETPLACE

FOR COPYRIGHTED WORKS

FRIDAY, DECEMBER 9, 2016

8:30 A.M.

U.S. PATENT AND TRADEMARK OFFICE

MADISON AUDITORIUM

600 DULANY STREET

ALEXANDRIA, VIRGINIA  22313-1450
OPENING REMARKS

(8:32 a.m.)

MS. PERLMUTTER: Good morning, everyone, and welcome to the USPTO. I’m delighted to see so many of you with us here today and also those watching online or joining us in one of our regional offices. Today’s meeting is hosted by the Department of Commerce’s Internet Policy Task Force. And for those of you who are not familiar with the Task Force, it was formed by the then Secretary of Commerce in 2010 to look at the policy and operational issues impacting the private sector’s ability to realize the potential for economic growth and job creation through the internet.

The Task Force’s work since then has only been amplified by an increasing focus on the digital economy at the highest levels in the Department of Commerce, including the recently formed Secretary’s Digital Economy Board of Advisors. And as part of the Task Force’s effort, the USPTO and NTIA have focused on copyright issues, producing two papers, a green paper in 2013 on copyright policy, creativity, and innovation in the digital economy; and a white paper earlier this year that made a number of policy recommendations.

In the green paper, one of our key topics was how the government can help facilitate the further
development of a robust, online licensing environment. And as many of you know, because many of you participated, we’ve already held two public meetings and solicited public comments on that topic. The most recent meeting was in April 2015, so now more than a year and a half ago.

And in that meeting, we focused specifically on the development and use of standard identifiers for all types of works of authorship. We looked at interoperability issues among systems and databases used to identify the owners of rights and the terms of use for works. And we looked at the possible creation of a portal such as the Copyright Hub that was under discussion in the U.K. for linking to those types of databases and licensing platforms.

Now, since that time, as happens in internet time, there has been a tremendous amount of development. Different technologies and different rights management solutions have emerged to address the challenges in different content industry sectors, and some of those we’ll be hearing about today. We also recognize that these discussions are far from limited to the United States, that they’re taking place around the world, including in Europe and Canada and China and Japan. And in the global environment in which digital content is
shared, of course, standardization becomes increasingly key for discoverability, for growth, and for interoperability.

Now, we believe that industry is best placed to develop forward-looking standards that reflect the state of the art in technology. But at the same time, in our meetings and in the public comments you all submitted, we’ve heard from stakeholders that the government can play a useful role in convening discussions and facilitating constructive cross-industry dialogue. Today’s meeting is designed to be the next step in doing just that.

So we’ve brought together experts and representatives from both startups and established industry players to inform us about current initiatives and current challenges in digitizing and cataloging and licensing all types of copyrighted content, and then hopefully to discuss ways forward.

So there’s a lot to discuss, as you all know. We’ll look at how best to identify who owns content and what can be done with it. We’ll look at developing catalogs or registries and creating new solutions that can build on those efforts to benefit consumers and creators alike.

Now, of course, there’s considerable focus
these days on the need to move forward in this area. And
I note that just yesterday the House Judiciary Committee
leaders recommended that the Copyright Office maintain a
searchable, digital database of historical and current
copyright ownership information and encourage the
inclusion of additional information, including metadata
such as standardized metadata, so very relevant to our
discussion today. So we look forward to an interesting
and productive exchange of ideas.

So a few housekeeping notes. We’ll start with
three panels this morning. We will then hear short
presentations about some of the new initiatives underway,
before we break for lunch and open up the hall just
behind us so that you can find out -- look at and find
out a bit more about these efforts.

After lunch, we’re going to have breakout
sessions, and if you haven’t yet signed up for one,
please do so at the coffee break this morning. And then
at the end, we will come together in a plenary session to
hear some short reports from the breakouts and also to
discuss what you think could be fruitful next steps.
We’d very much like to hear your thoughts about how the
Department of Commerce and/or any other parts of the
government can further assist.

So before we begin the first panel, it’s my
pleasure to introduce Paul Sweeting, who is the founder and principal of Concurrent Media Strategies and cofounder of the RightsTech Project, and we’ve asked Paul to provide an overview of some of the issues and topics that we’ll be discussing today.

    Thank you very much, and enjoy the day.

    Paul.
OVERVIEW: CURRENT AND FUTURE INITIATIVES

MR. SWEETING: Good morning. I am Paul Sweeting, and I’m a cofounder of a new initiative called the RightsTech Project, which is a platform for focusing discussion around technology, innovation, involving rights management and rights registries and content identification. And I was asked by Susan to sort of help out putting this program together this morning and to provide just a little bit of overview of why we’re here and what we’re talking about.

So developing the digital marketplace for copyrighted works. Well, one of the main challenges to developing the market is that the market is not uniformly digital. Certainly, the far end, the ultimate end of the pipeline, the consumer end, if you want to call it that, is essentially digital by definition. Consumers use digital devices to access work stored as digital files that get delivered over digital networks. It’s a completely digital ecosystem. And all of those transactions -- the accessing, the delivery -- happens at a machine-to-machine level. The files never sort of break character as digital files.

At the extreme other end of the pipeline, where content -- where works are created and brought to market, it’s not quite as digitally complete, but it’s largely
and it’s increasingly digital. Many works today are created directly as pieces of software, like video games, for instance. Many works are created using digital tools or undergo their first fixation, to use the copyright term, as a pattern of bits. Think about digital photography. The majority of music recording these days happens that way.

But there’s a big piece in the middle. Call it the business-to-business layer or the rights clearance layer, where all of those machine-to-machine transactions are supposed to be recorded, accounted for, paid for, remitted from, properly attributed, which doesn’t happen with the same machine-to-machine efficiency as the two other ends of the -- of the pipeline do.

There are a lot of reasons for that. Some of the reasons are basic. The information required for that to happen is not in a machine-readable format, or it might be in different formats on different machines, making it difficult for the machines to talk to each other. In many cases, the information simply doesn’t exist because it was never collected in the first place, or it’s incomplete, or it’s ambiguous. And in some cases, the people who have the information regard it as competitive and are not always inclined to share. I’m not going to name names, but you know who you are.
Some reasons have to do with the sheer complexity of the task. If you take the music industry as an example, you know, 15 years ago, 20 years ago, the main business was the sale of physical goods. That’s where almost all of the money came from. And those sales could run into the millions for a big-selling album, but it was still within the realm of information that -- or activity that could be relatively easily tracked and accounted for.

Who was supposed to be paid and how much from those sales was fairly standard. In some cases, it was actually statutory. And it was well understood, and there were systems that had been put in place over the years to manage that information flow and to manage that payment process. There was certainly a -- you know, occasional disputes around the edges where things weren’t always as transparent as they might be, but it was -- you know, it functioned pretty well.

Today, of course, streaming has almost completely supplanted physical sales. Not only does that change who gets paid and how much they get paid, but it -- it introduces a whole new element into the equation. In the past, where -- when a record was sold, nobody -- except in the case of venues or people who played music publicly, nobody really had to worry about
how often a record was played once it was sold because it was not relevant to any downstream revenue stream.

In the streaming universe, exactly how many times a record got played in a variety of different contexts is of paramount importance because it determines the calculations as to how much each interested party gets paid. So that’s a data management problem that is orders of magnitude larger, and the systems to manage that simply haven’t had as -- you know, the time to evolve to the same level of maturity that existed in the physical realm.

There are -- there are data management problems outside of the music industry. You think of the photography industry. There’s been an explosion in the -- both the volume and the velocity of reuse of visual works, often without any attribution information attached to it. And it’s an immense data problem for the industry, and once again the systems for tracking and managing that haven’t really evolved.

But a bit -- another really big reason for the lack of machine-to-machine efficiency in that middle layer is a lack of standards. The creation and the consumption of digital works is by and large governed by standards. The formats are standard; the network and communications protocols are standard; many of the
digital tools and sensors that are used to create the program -- the content is based on standards; and any service provider or creator that wants to get into the market can do so simply by adhering to those standards.

But a lot of the important steps in the middle don’t have comparable standards to govern them: the way that works are identified and distinguished from one another; the way information about them is presented, the metadata; the way rights in the work are expressed; the way attribution is made. Those are still mostly ad hoc processes that are not governed by standards. And that introduces an element of ambiguity into the system, and machines hate ambiguity. And until you can get that ambiguity out of the system, reducing it to automating it at a machine-to-machine level is extremely difficult.

So, today, we’re going to be talking about some efforts to create some of those standards and to -- and to reduce that ambiguity and reduce the complexity of the tasks that need to be managed. So our first panel will be talking about efforts to create standards for the identification and description of individual works. Now, we’re all familiar with standard identifiers, things like UPC codes or ISBN numbers in the book industry. But those are really merchandising codes. They’re designed to make it easier to track and manage retail inventory.
What we need, what -- you know, what the industry, the world needs, is a way -- is a standard way to identify works independent of their packaging because a single work can appear in multiple different packages. And we need a way to identify the work independent of those packages, but it has to be done in a way that can be associated with those packages because ultimately what’s needed is a way to trace back whatever happens to a particular package. We need a machine-to-machine link back to the underlying work. And that’s going to require a lot of standardization effort.

The second panel we’ll turn to is a discussion of ways to authoritatively register those works and to compile that information into some sort of accessible database. As was just mentioned yesterday, the Chairman and Ranking Member of the House Judiciary Committee issued an initial proposal to create a -- what they called a “up-to-date digital searchable database” of all copyrighted works and associated copyright ownership information within the U.S. Copyright Office.

It sounds, at least in principle, similar to what the British government has been working toward with their U.K. Copyright Hub, and we’re very fortunate this morning to have Caroline Boyd from the U.K. Copyright Hub here, who is probably, I would guess, going to become a
very popular person in these parts over the next several months. And hopefully she’ll be able to share some of the learnings from the effort in the U.K.

Our final panel will focus on ideas for creating more efficient transparent marketplaces by leveraging the information in registries and leveraging the standardized metadata and identification of works, as well as some new technology such as blockchain or what’s generically referred to as distributed ledgers. And there is an interesting debate around whether those registries are best managed, maintained by government agencies such as a republic agency, such as Copyright Office, or could proprietary registries have a role in what ought to be the relationship between those -- between those two.

So later, as was mentioned, we will have a sort of lightning round series of presentations from some entrepreneurs, developers who are here regarding some of the initiatives that they’re working on. And then we’ll go into the breakout sessions.

So that’s the sort of rough architecture of what we’ll be talking about today. And with that, I guess I turn it over to Paul Jessop, a man who has made a career out of putting numbers on things. Paul’s from County Analytics and is involved in just about every
significant metadata and ID initiative in this space.
And he’ll be moderating our first panel.

So, Paul, please come up.
Unique Identifiers and Metadata: How is a work unambiguously identified and distinguished from other works; and how are attributes assigned to that work in a consistent manner?

MR. JESSOP: I tell my mother that the U.S. government has invited me to come to Washington. I don’t say, “I put numbers on things.”

So good morning, everybody. I’m Paul Jessop. I’ll introduce the panel. I’m not going to give any detailed biographies. Those are the in the pack that’s been distributed, I assume, electronically.

On my left, George Howard from Berklee; Mark Isherwood from RightsCom; Giridhar Manepalli from the Corporation for National Research Initiatives, which is a mouthful; Stuart Myles from the Associated Press; and Carlyn Staudt from National Geographic.

I’ll let them say a little about themselves as we go, but not too much, because time is relatively short, and it’s what they say rather than who they work for that I think we’re interested in. I need to clarify that anything I say today is my view, not the view of anybody I have as a client. Many of the things I say
they won’t agree with. That’s why they hire me.

This is a, as was said earlier, a followup session. There were earlier seminars on this subject. Other panels will deal with all the cool stuff like licensing and terms, while we’re just going to deal with the nuts and bolts of identification and metadata. And it’s been said, if you can’t specify what you own, you can’t deal in it. And I’d add probably, well, you can’t deal in it certainly with any precision or safety.

I’m going to just go through a couple of definitional terms which the panel are very welcome to argue with, but they’ve served me well, and I would encourage their use. But other people may find a different mapping of terms or indeed say they’re completely inappropriate in their field of activity.

So identification to me is the association of something with a token that stands in its place. This came home to me this morning as I jumped on the Metro from my very modest hotel and got onto the Metro at a station called Mount Vernon Square 6th Street Convention Center. And I’d compare that with the French approach to naming their metro stations, where they have names like Republique or Robespierre, clearly a token rather than a functional description of what that station will do for you.
Moving on, binding. Binding is to me the process by -- it’s the mechanism which identification works. It’s how you associate the thing you’re identifying, if you call it a reference -- sorry, technical term -- with its code.

A registry, this is a word that’s been bandied around a lot. And to me, a registry is just about identification. It’s just about that binding of the identifiers with the things. If you move on to a rights registry, that might add information about who owns things, in what territory and what terms they’re available on.

And then you’ve got all the other cool stuff, how many beats a minute, whether it’s popular, whether it was cited on last night’s news. That’s kind of, I think, for these purposes out of scope. I’d refer to that as discovery data, how you can uncover it.

Those names, I say, are up for grabs. And what I’d ask the panel initially, and I won’t necessarily go along in linear order, is what their experience has been applying these sorts of principles to the fields of endeavor that they’ve been working in. And I’m going to start with Mark Isherwood, just because we’ve shared some of these experiences, and you may want to kick off with your background in doing these sorts of things in the
MR. ISHERWOOD: Okay, thank you. Good morning, everybody. Although Paul attributed me as RightsCom, I’m actually here representing one of our clients, Digital Data Exchange, or DDEX, which hopefully many of you are aware of. DDEX is a standards organization focused pretty much entirely on the music industry, and we develop standard message formats for communicating data up and down the mainly digital supply chain, not exclusively.

So DDEX doesn’t really do identification in the sense that we’re managing a token as Paul called it. We are able to carry that information and actually encourage people who use our standards to do that, but we find through implementation of the messaging formats just how -- what’s the word -- problematic some of the standard identification systems are. What happens when you standardize the format you communicate is that the quality of the data really start -- or the lack of quality of the data really starts to shine through.

And, so, we do work mainly informally with other standards bodies relative -- of the standards bodies relative to DDEX like IFPI for the ISRC and SESAC for ISWC, but -- and this is my personal view, not
in the sense -- and structured so that there is actually
a common way of moving forward amongst all of the
standards relevant to a particular media sector and,
secondly and very much a secondary activity, similar
across standards organization interactions across media
types because the recipients, basically the retailers,
would like to see everything, regardless of which media
industry it comes from, is being managed in roughly the
same way.

Now, we don’t even have the first bit in place
really within the music industry, so actually spreading
that out to cross-media is, I’m afraid, you know, another
step further on. So I hope that gives an indication of
what DDEX does and where I’m coming from in terms of this
panel.

MR. JESSOP: Thanks, Mark.

George, you’re coming for a slightly different
perspective on music from -- through your Open Music
Initiative you’re involved in. Can you talk about how
these issues affect that?

MR. HOWARD: Sure, yes. I’m here representing
Open Music Initiative, which is a nonpartisan entity that
grew out of Berklee’s Institute for Creative
Entrepreneurship and is sort of a growing consortium of
both academic institutions, as well as on the academic
side -- Harvard, MIT, and Berklee -- as well as entrepreneurs from sort of startup stage all the way up through established companies like Netflix, all of the major labels. And very much working to be -- and the term I’m using -- and again, it’s always hard as we’re defining these, and I don’t know that I’m necessarily speaking for OMI, but I kind of am -- a coordinating agent.

In other words, we’re not going to build anything ourselves. We are interested in precisely what the buzz word I’m sure of what -- of the day will be, this notion of interoperability. We want to provide guardrails, guidance, so that people will be able to build more effectively as we move forward.

My life has been defined as sort of tilting at a windmill of trying to help artists create sustainable careers on their own terms. And, so, the junction of OMI in that gesture and what that manifests in my life is, you know, running record companies or cofounding entities like TuneCore, is really one of seeing us go from eras of unstructured data to structured data, right?

And I think if we look around and see that -- and increasingly I think it’s important to be looking to adjacencies. I think the music business has been historically bad at looking at adjacencies, so I think
it’s great to convene groups of people that have different experiences. But if we think about the sort of movement from unstructured data to structured data or maybe better said from modeling to measuring, from eras of when you’d have your electric bill read twice a year and then the rest of the year was just an extrapolation to, no, I know exactly how much energy you’re using every second. To get there, to get to a precise sort of measuring rather than modeling, to take all the data, whether it’s to map a genome or to map a song, requires interoperability.

My personal thesis, and I think what we’re trying to balance on the OMI side of things, is, sure, there has to be an academic side where you’re thinking about standards and APIs, but I think we’ve proven, arguably, that unless you have transactions, unless you have commerce, you’ll never get to standards, right? Transactions lead to standards, not the other way around.

And I would argue that the failings of other types of entities around this -- these types of objectives have failed because they’ve tried to define the standards first and then say now let’s go transact around them. I think you have to have a strawman out there, some guardrails, get transactions going, and then people in the market ultimately decide what the standards...
will be. And, so, that’s the balance that we’re trying
to strike at OMI.

MR. JESSOP I think that’s interesting. I
think Mark would probably agree that DDEX succeeded
because it superceded a series of Excel spreadsheets,
sealing wax string, and Scotch tape, which was not very
effective for those concerned.

I’d like to move to National Geographic now
because I went to an interesting meeting earlier this
year. They were trying to give numbers to marine
animals, what we call the internet of oysters. It didn’t
really turn out that way. I guess you’re less concerned
with identifying the animals than the representations of
them. So do you have some experiences in the area?

MS. STAUDT: Sure. I come from the business
side of National Geographic, so I’ve been there for about
20 years. I’ve produced programs; I’ve programmed
programs on the channel; and now I am in charge of
monetizing our video content across the globe. I really
became interested in this subject matter. Again, I’m not
from a technical background. When I’m trying to move our
assets across the world quickly and be able to monetize
them effectively, and I realize that our lack of
structure in the way that we identify these assets was
really, really -- I was struggling with it.
Just recently, we were acquired, or entered into a joint venture, with 21st Century Fox. And, so, I’ve also been involved with taking our assets and incorporating them into robust systems that 21st Century Fox has in place and realizing how in a lot of ways our systems had been inadequate and that what they were offering as systems that gave unique identifiers to titles could really kickstart and supercharge our ability to monetize.

And that’s really how I started to become interested in this topic and how crucially and vitally important I think it is for our business, especially being a global business, that we really take this seriously and invest resources behind it.

MR. JESSOP: Cool. Thanks much.

Giridhar, you’ve been involved in audiovisual as well, but also in a way that works across fields. Can you say something about that?

MR. MANEPALLI: Sure. I am primarily here because Don Dulchinos, the executive director of Entertainment ID Registry, the association has asked me to proxy for him. And we at CNRI have actually helped the founders of the Entertainment ID Registry Association put together the EIDR registry in the first place and while at CNRI we focus a great deal about information...
management in an efficient way and in a secure way with the help of several architectural principles that we clipped together and call them as digital object architecture. I am primarily here to represent the entertainment ID registry focus of identifying these entertainment and movie assets.

One thing that the EIDR registry has done in particular is to minimize the amount of information that it actually captures and associates with any identifier and left the value-added services out of it. So in many ways, you can think of the EIDR registry as an idiot savant who knows a little bit about these various assets but that could be later on used by several services downstream.

Later on during this panel discussion I hope I can get into the details of what exactly is being identified and what metadata is being captured and the business and the social reasons for it.

MR. JESSOP: Thank you.

And, Stuart, the world of news and information has been kind of salient lately as people wonder about its validity. Does identifying help us with that, and does it help your businesses?

MR. MYLES: I’d like to think that news is always salient, but --
MR. JESSOP: But only when it’s true.

MR. MYLES: So, yes, so I’m Stuart Myles, the Director of Information Management at the Associated Press. So I deal with all kinds of metadata for all of the news that we publish or distribute and aggregate and so on. So that’s a couple hundred thousand texts or photo or video items a day. And we have a archive of sort of 300 million items that we sell to people. Basically, the AP has been a B-to-B publisher since the 1800s.

So one of the things that we want to do is -- well, there’s a couple changes going on in the industry that really drive our need for rights. One is that it’s traditionally been a very manual process where people are exchanging news between newspapers or websites and radio stations and so on, and an editor looks at every single one so they can read the rights statement and so on. That’s less and less true.

And the other thing that’s going on really on the business side is that we’re trying to create new businesses. So we want a new kind of ad hoc ways of selling the news and selling our photos and selling our video and so on.

So we got into the right side of things, and for me, it was a -- in terms of identifiers, it was a
series of surprises. So things that I would be simple
and straightforward turned out to not be so. I thought,
like, okay, let’s start off with something simple like
how do we identify a photo. Okay, we’ve been doing that,
you know, for a hundred years; it should be
straightforward.

It turns out it isn’t for a few different
reasons. One is that everybody wants their own
identifier for different reasons. So, you know, the
computer geeks will manufacture a long, opaque GUID
that’s great for computers, but that’s horrible for photo
editors. They want to use what they call the slug, which
actually dates back to hot lead and the print newspaper
days. Or a friendly key, which is sort of a short,
pneumonic thing and so on and so forth.

So, like, okay, we can’t really agree on how
we’re going to identify things, but maybe we can map them
all together. All right, that sort of works, but then
what is a photo? Is it the preview version, the main,
the thumbnail, all of these different things. The same
sort of thing for videos, except it’s even worse because
you’ve got aggregates of things. So does the video
include the text, the script that goes along with it?
What about the individual slices and so on?

So even just -- things turn out to not be
things, atomic things. They turn out to be molecules. They’re aggregates of different pieces of information all aggregated together, and then you think about translations and so on. It turns out to be incredibly complicated.

So, like, okay, maybe we can talk about the contracts. Like, well -- because we want to digitize those, obviously. So we’ll say, like, well, let’s look at them, presuming they’re all digitized. Let’s dig them out of the filing cabinet and maybe we can type them in. And, unfortunately, we don’t have contracts written down often. They’re often just handshakes, inviting different agencies, you know, sort of we’ll send you some of our news; you send us some of ours and it will all be fine. Okay, and so on.

So -- and even how do you describe things, how do you manage things across versions. So, yes, so things that I thought were quite simple each as you sort of peel back the layers, these things turned out to be very, very complicated. And it’s not that people don’t want to make things work; it’s just that -- it’s just that we’re encountering tradition, the way work flows currently work, the way people want it to work. You can try and impose things -- solutions that make sense for, let’s say, machines, but if they don’t work for the people who
need to work with that content or make money off it, then it’s going to be very much an uphill battle.

MR. JESSOP: And so say all of us.

So what -- I’d like to just go down the panel. What entities is it? I mean, bearing in mind we’re here talking about the licensing and/or managing of copyrighted works. Which sorts of works do we need to worry about most? Where’s the leverage, and what can we probably leave to phase two?

George, where would you start?

MR. HOWARD: No, I mean, this is amazing, right? And this is what I mean about sort of adjacencies or collisions or whatever. I mean, we’re in this era of terrible echo chambers where we just feed our information that we want to hear back at ourselves. So hearing Stuart describe this, you know, most of my work is sitting around with other music people, right? So you say that -- your description, and I’m writing them down, that’s the music business, right? And I’ve always said, the music business is a canary in a coal mine, right? And as goes the music business, so goes other businesses, almost axiomatically or maybe at the same time. So where I always -- I mean, and your phrase, like, we want this to work. It’s sort of -- it’s sort of a crime looking for a villain. So I did a project with
National Public Radio where NPR had said, okay, in a post-Serial, the podcast world, we want everything to be a podcast, of course, because that worked once and, therefore, it will, you know, always work, right? And, so, let’s make everything a podcast. So they took their over-the-air ephemeral broadcasting and said, well, let’s make it downloadable. No, because you don’t have the music rights for that, right?

So they call me in, what do we do, George? I said, well, you’re [expletive], right? And you are --

MR. JESSOP: You are allowed to say that.
MR. HOWARD: Well, I looked around. I don’t know who I was looking for, my mom or something, right? And, Mom, I told you to wait in the car.

And, so, well, what do we do? And I said, well, the problem here is there’s this crime without a villain, right? I mean, the artists certainly want this to work; the labels don’t really have any issue with this. There’s just not a system to do it.

So we did actually stand up -- this word will get tossed out and some people will get mad at me for saying; others will love it. We did stand up a blockchain for them and allowed for sort of at least line of sight around what are the necessary rights and how can it interoperate and all of those things.
Where I go, to your point, is you were sort of asking — I forget the precise way you worded the question, but it was like what type of rights or what — I mean —

MR. JESSOP: What entities.

MR. HOWARD: Well, but, so, I think that we’re in a sort of a post-entity era, right? Your atomization of stuff, right, an internet of things, all of these things, it’s just ones and zeros. The music industry kind of fell apart, not because of piracy but because it switched from analog to digital, which meant it became information, and people just wanted to diffuse information.

So the same exact problems or challenges or opportunities you’re having — and, by the way, where are you from — National Geographic — that’s what we are facing, right? Arguably slightly more complex because of music copyright is typically going to have two rights holders because there are two copyrights associated with each work, but who cares?

So at the end of the day, where I always go down -- back to is you create a work and arguably through most industrialized countries, because of Berne and other treaties, it’s going to be governed roughly the same way around the edges, and you get a bundle of exclusive
rights. If you start from there and then look at how those works are used, and this is where I go back to transactions lead to registration, you can then track back whether it’s a photo, whether it’s a piece of news, whether -- you have essentially the same bundle of rights.

So I’m hugely indifferent but also hugely excited that the conversations with music people and news people, et cetera, can now confront the same problems because they are precisely the same problems. And the music business has a terrible habit of sort of verticalizing and saying, well, no, this is just us; we must call NASA to figure these problems out. That’s not the case. So start with the bundle of rights.

MR. JESSOP: I agree. I mean, I call this music industry exceptionalism.

MR. HOWARD: That’s great. I’m stealing that.

MR. JESSOP: The music industry says we’re different.

MR. HOWARD: We’re different.

MR. JESSOP: You have to understand, we’re different.

MR. HOWARD: No.

MR. JESSOP: No, they’re the same. But that said, the entities, and I’m going to argue with you here.
MR. HOWARD: Do it.

MR. JESSOP: The entities in there are different because, you know, who cares if it’s a work or a recording? Actually, the songwriter cares.

MR. HOWARD: No, but no more than -- no more than the photographer.

MR. JESSOP: Well, that’s right because you’ve got the same --

MR. HOWARD: Or the writer.

MR. JESSOP: -- the same stratification of rights in photography as in movies as in music as in everything else. You start with something and build upon it.

MR. HOWARD: But, so, then, who cares to be -- to answer your question is the creator. Whether you’re a creator or the rights holder, however you want to define it, whether I’m a creator or a rights holder of a photograph, of a piece of authorship, what -- musicians don’t care more than photographers.

MR. JESSOP: Absolutely they don’t. But if -- sorry, I am going to come back to you in a moment. But if you’re creating a recording, then the class of data you associate it with includes things like performers, instruments, places, recording quality, all sorts of things.
MR. HOWARD: Maybe --

MR. JESSOP: If you’re a songwriter, those things don’t apply. You’ve got a different class of information you need to associate with that.

MR. HOWARD: Completely disagree. That is something --

MR. JESSOP: So how do you -- how do you assign --

MR. HOWARD: That’s something --

MR. JESSOP: -- Lucille to a piece of sheet music? It’s absurd.

MR. HOWARD: It’s not absurd. I mean, it’s exactly what he’s going through. He’s saying they’re taking old, crusty artifacts and trying to register them in some digital way. Lucille, by whomever --

MR. JESSOP: Lucille is B.B. King’s guitar.

MR. HOWARD: Oh.

MR. JESSOP: It’s a particular instance of a particular resonating guitar, and you’re telling me it can be associated with a piece of sheet music?

MR. HOWARD: Of course you can -- no, no, a piece of sheet music?

MR. JESSOP: Yeah.

MR. HOWARD: I don’t -- I don’t understand the premise.
MR. JESSOP: Well, the musical -- the musical work isn’t associated with the instrument that’s used to record it.

MR. HOWARD: It could be.

MR. JESSOP: The instrument is associated with a recording that’s made of the work.

MR. HOWARD: I drive into my driveway and my little dongle on my keychain talks to my Nest thermostat and increases the lights and talks to my Sonos to play B.B. King. Those are all interoperable little pieces of atomized information talking to each other. If you think that we’re not going to start atomizing this and structuring those things on a blockchain so that we can track -- there will be a time in the not-so-distant future when the next time some jackass launches an IED we’ll be able to take each component part of that and track it back to source, 100 percent.

MR. JESSOP: So I’ve been -- Mark, I know you want to say it, but I’ll come back to you in a moment.

MS. STAUDT: I mean, I’m just going to take a step back and take a different approach to your question. From a business perspective, National Geographic is an organization that has print, photos, video; we have music assets as well. I look at it from a business level and what I can monetize the most quickly and the most
effectively and make the most money with. And for us, video is becoming more increasing of importance.

If you look at a lot of the data that we’re seeing on mobile consumption, video usage is going up tremendously. So just from a business perspective and looking at the portfolio of assets that I own, video is becoming increasingly important.

MR. JESSOP: Mark.

MR. ISHERWOOD: Well, so, I will try to answer your question about identification. Some of you will know a project called the INDECS Project, which came up with the line that people do deals about things. And what you need to do in terms of identification is identify the people, identify the deals, and identify the things. And in each case, those may not be single entities; they may be very complex conglomerations of people. So it’s not just the artist; it’s the third trombone player or whatever it happens to be.

And what that’s highlighting is a phrase for which I have to put $10 in the swear box, which is functional granularity. If you need to know it, you need to know it. If you need to identify it, you need to identify it. And that’s a discussion that you have to have amongst yourselves. And that comes back to Stuart’s point about complexity, and I think it’s quite an
important friction that exists.

Last week in London, I was at a DDEX meeting where we took probably two hours to determine what we all meant by “featured artist.” If you had been a member of the general public sitting in there, you’d have been going, what the hell are these people talking about. But what that was was a function of granularity conversation, is we need to have a common understanding of what we mean by “featured artist” so when our machines talk to each other they know that too.

And it is complex. And the friction -- and this may sound like a criticism, Carlyn, and it’s not meant to be, but a friction is then between those ops and IT people who are trying to solve these operational problems and the businesspeople who just want to do it. They want to get it out there; they want to get their dollars coming in; and then they turn to the ops and IT people and say, well, why is it such a big problem. Well, it’s because, you know, we have to do functional granularity. If you want us to identify it and to be paid on it, then we’ve got to figure out a way of doing it. And --

MS. STAUDT: I completely agree with you, Mark.

And, actually, that’s why I’m here --

MR. ISHERWOOD: Yeah.
MS. STAUDT: -- because I’ve become one of those businesspeople who actually is starting to get interested in this area --

MR. ISHERWOOD: Yeah.

MS. STAUDT: -- because if I pay attention to it, then you can help me more with it.

MR. ISHERWOOD: Yeah, yeah. So I think, you know, those are the two points I wanted to -- those are the core things you need to identify, people deal in things, and we have to recognize the inherent conflict between business and ops and IT around this because this is complex stuff. It’s not easy, and it takes time. And, so, we just have to be aware that not all corporations internally are going to be pulling in the same direction on some of this stuff.

MR. JESSOP: Okay, so I want to just take 30 seconds to do the tutorial piece on functional granularity because it’s important.

Yeah, 2000, the document was written, the Indecks Report. It’s not out of date. It was written in a technology-independent way, and it’s still salient. And if you haven’t got a copy pinned to the wall above your bed, you should have. Functional granularity says that if for some purpose you need to distinguish between two things, you need to give them different identifiers. And
that’s so obvious, but so much time has been wasted in
these industries by not getting that bit right that it’s
extraordinary. And, so, if you need to distinguish
between things for some purpose, you need to give them
different identifiers.

For some purposes, my car and your car are the
same. If you want to buy a new alternator, they’re the
same car because they’ve got the same alternator in them.
But when you go through a speed trap and a photo camera,
you want to make sure that they’re differentiated so you
get the speeding ticket to the right person.

Giridhar, can you talk about the relevant
entities in the EIDR system and what it is you identify
and how that helps and what you wish you did, what you
wish you hadn’t done?

MR. MANEPALLI: Right, so, George talked about
-- start with the bundle of licenses or bundle of --

MR. HOWARD: Oh, bundle of rights that you’re
ascribed by law, yeah.

MR. MANEPALLI: Right. But when you’re talking
about those rights, you need to clearly know what you’re
actually talking about in terms of the actual assets. So
from a consumer standpoint, let’s say that I am watching
the movie Top Gun on my TV. And let’s say ten days later
I watch the same movie using Netflix on my computer. To
me as a consumer, they both look one and the same.

When I talk about it with my friends and chat about it, I say, well, I watched the same movie twice because I loved it so much. But in reality, when you’re talking about rights, you need to understand that the movie that I actually watched on TV is a different sequence of bits compared to the sequence of bits that I actually watched when I was watching on Netflix.

And when you’re talking about rights, you clearly need to identify that there are different kinds of rights associated with two different manifestations of the same movie. So one thing that we have done in the EIDR registry is identify granularly these various manifestations of this abstract work. For doing that, what we have done is that we register the abstract work itself, which we call as title objects, and we allot a unique and resolvable identifier to that, and we then build a graph.

If there are multiple edits because one is meant to be played in just airplanes, one is meant to be played on Netflix, then we actually create multiple edits and identify each of those uniquely, and then even extend that further to capture the different technical variations of it. Like if you have a different language subtitle to it, then we identify that, because all of
these -- identifying all of these separately actually is
critical in terms of managing the entire ecosystem
throughout the distribution pipeline.

Not just from the licensing standpoint, but if
you imagine when a movie is being produced, several
different organizations come together, not only at the
production -- in the production phase, but also in the
post-production and distribution phase. And different
people have different rights and authority over the
assets that they are creating. So you need to precisely
identify what those are. And that’s one thing that I
think EIDR registry has done well, which is why we are
seeing the use -- the extensive use of the registry in
the last couple of years.

MR. JESSOP: So just to be clear, you’ve got
abstract entities, which would be Top Gun, the movie; and
then you’ve got identifiers for things which are
specializations of that, which are particular prints,
picular versions, particular edits, particular
soundtracks.

MR. MANEPALLI: That’s right. And different
kinds of metadata is actually associated with different
assets at different levels.

MR. JESSOP: Right.

MR. MANEPALLI: To uniquely identify what we
are talking about.

MR. JESSOP: Stuart, what about your world?

MR. MYLES: So I think I’d pick on two kinds of identifiers. One is really driven by our business as well, so there’s an insatiable desire for video. You know, I mentioned we do a couple hundred thousand items a day, which is mainly text and photos. We only do maybe 100 videos a day, so not nearly enough for what our customers would love to consume. There’s just no end. And really our customers are not necessarily the news industry anymore. It’s, you know, all kinds of people. We’re happy to sell to almost anybody, our content as well.

So really identifying videos and the complexity comes in exactly the kinds of things that we’ve been talking about, about like, you know, are these two different cuts of the same video the same, yes and no and so on. But actually the identifier -- the kind of identifier that I -- I think everybody else in the news industry, or that is needs, and if anybody here has thought this, please let me know, it’s identifying the organizations or the people or -- so most of the rights that the news industry deals with are restrictions.

So let’s say Yahoo News out, how do you identify that? So that’s not Yahoo; that’s a part --
that’s a department within Yahoo, which may or may not exist across reorganizations and so on. Editors looking at that typically understand what that means, hopefully, but how do you do that in a machine-readable way? How do you do it in a way that cuts across different organizations in a way that’s scalable, not necessarily owned by one company and so on. So please, whoever has solved that, let me know.

MR. JESSOP: Super interesting. We didn’t plan this. While I didn’t ask for that, so that was the segue into the next, where do we need to identify parties, people, organizations? I spend a goodly proportion of my life worrying about this than trying to do it. I’m just conscious what it says on the screen here, we’re about the digital marketplace, and we’ve got parties of different characters. We’ve got end customers who are doing the licensing, and then we’ve got participants in the things we’re identifying or things we’re trading, which who are due some kind of recompense, some compensation.

Do people on the panel have a -- I mean, we’ve heard from AP. What about the needs for identifying parties in their systems? Mark, Start.

MR. ISHERWOOD: Well, I mean, one of -- in a way, this is a function of granularity thing. I mean,
within DDEX, we have -- we have representatives from right across the supply chain, so at the sort of musical work end, we’ve got rights societies and publishers, record labels, aggregators, DSPs and so on, so it runs right across.

And for each of those sort of sectors, they need to know different things. So referring back to the interesting meeting last week about what “featured artist” meant, that was primarily a group of people like SoundExchange here and PPL in the U.K. who need to know a bunch of information that the labels who own them themselves don’t really need to know past a point because in most territories nonfeatured artists, session musicians, whatever you want to call them, get some sort of remuneration for secondary uses of the sound recording --

MR. JESSOP: It’s worth saying, there’s a statute that says they’re due that.

MR. ISHERWOOD: Yeah, yeah.

MR. JESSOP: It’s not just been dreamt up.

There’s a law that says that.

MR. ISHERWOOD: No, no, no, sure.

MR. JESSOP: Or actually it wasn’t until somebody got it signed into law.

MR. ISHERWOOD: And it’s sort of slightly
different in different territories, but obviously it’s a big part of what SoundExchange does. And if you talk to SoundExchange, one of their biggest problems is actually identifying these people because these recordings took place in a studio in the middle of nowhere in 1970. Everybody was stoned out of their head, and they can’t remember who was playing whatever. And yet they’re due money.

So, you know, and that’s a different view from the music rights society. So you don’t care two hoots about the artists unless they happen to be creators and writers of the song. And, so, you have to be -- you have to be aware that it’s different things for different people. And it depends where you’re sitting in the supply chain.

If you’re looking at it in the whole, you need to identify anybody who has a role to play, who has done a deal of some sort, however innocuous, who is likely to receive money. Money, though, is not necessarily the sole driver. If you’re involved in archiving in a record company, then you want to know the complete lineup of people, including people who are not necessarily due royalties as a consequence of what I was just talking about.

So, again, archiving looks at the world from a
completely different place. Some of those will want to know, you know, which digital audio workstation was being used, how many microphones there were, which one -- what -- well, you know, what type they were, you know, what the sound levels were. It just depends on where you want to be and where you are in the supply chain.

MR. JESSOP: So let’s stay focused on the marketplace issues. George, you were shaking your head at some of that.

MR. HOWARD: Yeah, well, no, I mean, partly in agreement and partly in disagreement, which is good, but I’m glad you brought up SoundExchange. I mean, I think objectively we can say that SoundExchange has been successful just from a year-over-year growth in terms of collection and distribution, right? It’s a staggering thing.

I would say that unequivocally the reason it’s been successful is because in order for creators or rights holders or performers -- somebody mentioned the third trombone player -- how do we find them? Well, if you’re a third trombone player and some other third trombone player says, hey, man, if you ascribe -- if you put in your rights to SoundExchange, you will get money, then that other third trombone player says, well, I’m going to go get me some of that. And that’s what’s going
That’s why SoundExchange -- SoundExchange says “we got the money; we have a statutory mandate to collect this money; we can’t give it to you unless you prove authenticity and the right, and then we’ll give it to you.” And that has been shown objectively to work, that more people are saying this is my right. So it’s just pure-ass incentive.

The through line of this -- and, Mark, to your point about, well, money’s not the driver; it could be archival purposes -- I will say if these archivists don’t figure out a way to monetize it, they’re going to go away. And that’s a sad thing for the world, but that is the truth.

And the through line of all of this conversation so far is we -- National Geographic; we, Associated Press -- for the life of me I don’t know what you’re doing -- but we -- we want to have more business opportunities with our heretofore locked assets. We want to unlock those assets in a commercialized way. And I say to you, unlock them and find the rights holders. If you can’t find the rights holders, once it rises to a level where there’s actual value, those rights holders will find you. They will sue you. You will then either come to terms or you will not, and transactions will lead...
to registration and deals.

   It’s ludicrous to think that we’re going to sit here and think how we’re going to use these disparate rights in new ways. I have this idea for a VR game, whatever, where it will be called “Don’t Fear the Reaper.” And it will be -- you put the headphones on and the “more cowbell” song comes on, and it’s me on a horse with a reaper behind me.

   What’s that? Is it a derivative? Is it a public performance? Is it display? Is it reproduction? It’s all of them. We have those rights. We have that codified. I would have to go get those and use it. And those rights holders would either get paid or they would sue me.

   MS. STAUDT: I think it also gets even more important when you start creating derivative works from the original work. So to your point, if you do a VR piece or we put together a compilation of something, even carrying that rights owner one step further into the creation of a new work, and works are being created and compiled in --

   MR. HOWARD: We know this.

   MS. STAUDT: -- volume.

   MR. HOWARD: For the music business.

   MS. STAUDT: Yeah. And it’s just -- that’s
also key, and that identification up front is key.

MR. HOWARD: It won’t happen up front. How can you anticipate what the kid in the bedroom is going to do with a Queen song and a drumbeat from Miles Davis? You know, you can’t anticipate that.

MR. MANEPALLI: But you know about their existence when they were created, so if you incentivize the entire participation with this ecosystem to actually --

MR. HOWARD: How?

MR. MANEPALLI: -- allot -- if you incentivize them --

MR. HOWARD: How?

MR. MANEPALLI: The question is not about how at this point; the question is whether or not we can actually move towards that goal. And -- but anyway, if you incentivize those people to actually allot these identifiers at the time of creation --

MR. HOWARD: I’ll answer my own question. You incentivize them with the potential of making money or generating awareness for their work.

MR. MANEPALLI: Or if there is no overhead in creating those identifiers, then they might as well create those identifiers.

MR. HOWARD: No.
MR. MANEPALLI: Which is exactly --

MR. HOWARD: You don’t know artists. They will not do that.

MR. MANEPALLI: Which is exactly what is happening in the data set community, so we can take that as a precedence and we can work towards it.

MR. JESSOP: I think actually George comes to a very interesting point, is how you incentivize the people and how they get the tools into their hands that do these things for them. And this -- it’s been very clear in one of these aspects that asking artists to do stuff -- in fact, asking publishers to do stuff, which is kind of a bit peripheral, is a guaranteed recipe for it not happening.

MR. HOWARD: Yeah.

MR. JESSOP: So there’s a standard called ISTC for standard text code. It is more moribund because it relied upon publishers to register basically manuscripts when they came through the door and got accepted. And there was no clear reason for them to do it. Because they haven’t done it, there’s a whole bunch of really cool downstream stuff that isn’t happening, but there wasn’t a clear link. There wasn’t a motivation between the action and the consequences downstream. Making things -- not transparent, but making things automatic so
that a creator doesn’t need to think about it, it just
happens, is a much surer path to success, I think.

Mark?

MR. ISHERWOOD: Yeah, but, I mean, the point I
wanted to make is I kind of partly agree with George and
partly not. But, I mean, so far, we’ve largely been
talking about what I call established business,
established, in my case, music industry. The thing is
we’ve now got a huge chunk of creators who are not in
that -- they’re nowhere near part of that established
environment. And to say to them you need to get an ISRC
for your recording is utterly pointless because they --
either they don’t care or, you know, you know, they just
won’t listen.

And I think there are issues there about how
the systems -- however good or bad they may be -- are
available in a way that you described, Paul, because I
think it doesn’t mean that we’re excluding that kind of
part of the industry from the internet itself because
they can still find money, but they won’t be part of this
kind of standardized identification infrastructure. And
that is going to become more and more of an issue as time
goes by.

MR. JESSOP: So that brings us to a point, and
I wanted to take this conversation, who does the
registration. And that sort of is a great segue in a sense because I’m suggesting that if you’re a bedroom deejay then it’s the application that you’re deejaying on that should do the identification, that -- when you say, yep, that’s done, I finished that, send it to my friends, it should at that point identify it in some way so that when they -- and we’ll leave aside for a minute how exactly this happens mechanically, when they say this is cool and remix it, the EIDR identification puts this through into the derivative work, and I take your point entirely.

But in some cases, the identification is done by third parties entirely, by bibliographic agencies, by librarians in the case of some parties. Most of the party identifiers around there have come out of the Library of Congress, blast them. They’ve done a fantastic job on that, quite without anyone’s knowledge. People say, well, how come I’ve got this identifier. Well, the librarians did that for you. That’s what librarians do, ever since we burned the one in Alexandria -- the other Alexandria -- they’ve been giving index cards to stuff and keeping track. But so who should do the registration?

Mr. Isherwood: Can I just pick up on the point you made about the sort of bedroom deejay? DDEX has just
launched about two months ago a new standard called the recording information notification specification, and what we’ll be working with over the coming months is working with digital audio workstation companies to actually integrate this into their standards.

There are also a number of companies like Orderly or Jamba, various other companies like that that are creating apps and tools for creators and musicians to actually start to collect some of this data. And if we can persuade them to integrate the RIN standard in as well, then we’re going to start to, A, find a way where we can start doing the identification, but also find a standard way in which the sort of data at the point of creation can actually gradually start to enter the sort of established supply chain. So this is something else that we’ve worked on, and it kind of brings a complete suite of standards from creation point to when the money gets back to the rights owner.

MR. JESSOP: Yeah, I mean, just two points. I was on the -- I came through New York on the way here. I met a company that are doing 500,000 tracks a year -- and completely almost unbeknown to the bedroom deejays and school marching bands and whatever who are distributing their stuff through them -- they get an ISRC as part of that. And it just works. And there are plugins for
Adobe Photoshop that get you a watermark and a number to make sure that your photograph is visible to other people in a -- identified to other people in a visible way -- invisible way in this case.

Who does the registration for audiovisual works within the EIDR system, Giridhar?

MR. MANEPALLI: It’s mostly the creators because they care. And there are two perspectives here. I guess the perspective that George is taking is that the parties who care are the parties who are going to register and get an identifier allotted to that. The other perspective that I’m taking, not necessarily as the only perspective, is that if you can somehow lower the overhead of creating these identifiers and given that most of the assets today are born digital, you can actually associate an identifier at the time the digital asset comes into existence. And if you can make that happen, then we don’t leave it up to the downstream services to actually allot those identifiers because if the same asset is now being used by two or three different parties, then it will end up with three different identifiers because they haven’t had any idea that these other parties are also using the same asset.

So if you can somehow come up with a -- with a system for associating these identifiers at the time when
these assets are created, then the disambiguation will be
-- well, the ambiguity will be less.

MR. JESSOP: I’m going to come to Stuart, but I
wanted to say there are microphones in the room, if
you’ve got something you’d want us to talk about, you
need to go to one of them and then wave at me so you
catch my eye.

News must be almost as complicated as music in
this sense as to where these things are going to get
identified and who’s going to register, whatever we’re
going to do with them.

MR. MYLES: I mean, so for us at the AP and
most news organizations I’m aware of, it’s not really
that simple what you’re describing. So, I mean, often
the person who creates a work is not the rights holder,
right? So, in fact, it’s very rarely the case. So one
of the complications, then, is it’s normally an
organization that’s the rights holder, but organizations
or parts of organizations that change over time, merge as
acquisitions, spinoffs, companies go out of business and
so on.

And, also, so we don’t really do central
registration. It’s really essentially -- typically it’s
we share works, we reassert an identifier, so as a piece
of content flows through different news organizations, it
gets multiple different identifiers, and there is no centralized system.

MR. JESSOP: And National Geographic, do you get identifiers through from your suppliers?

MS. STAUDT: Yeah, we get -- I mean, I can only speak from the video side of the business. We recently have started to work with 21st Century Fox and their Foxipedia, which is basically at the moment of creation of that video asset it gets a unique identifier and then can move on from there. But we’re struggling across the organization. That’s just particular to video.

How do we, then, build that out to make sure that photos are encompassed and the print works and -- and as a multimedia company that our systems are joining up across all platforms.

MR. JESSOP: A challenge indeed.

In the audience, I’m hoping your microphones are going to work.

(Comment off microphone.)

MR. JESSOP: Okay, I can hope that microphone needs to be done something to it, but so the point was that identifiers are being stripped out by the engines that are being, A, used by the large tech companies. I don’t know how they get away with that because the --

MR. HOWARD: Who gets away with what?
MR. JESSOP: Well, with removing rights management information from photographs when they use them.

MR. HOWARD: We talk in these bizarre -- what's the word -- like, who's "they"? Like there's some -- I mean, this isn't "they." There's no -- I mean, you're dead right. If I -- if I want to upload something to YouTube and YouTube's content ID says, no, you can't do that, I tweak it one DB and yes, I can. So your point about an immutable ledger -- and somebody brought up Foxipedia, which I assume is like Wikipedia, right? -- Wikipedia has a change log. So if I put some bad data in there, eventually the wisdom of the crowd, such as it is, or the Wikipedia editors will say, no, that's bad data, and it will get changed, but I can scroll back and see that.

That's the metaphor for the blockchain. You can put bad data, garbage in, on the blockchain, and it will be immutable. What we're really talking about is reputation management. What we're really talking about is do you have any authority to ascribe something there. And then we're talking about what happens when the chain is broken, when DRM -- nobody wants to say that word, but that's exactly what we're talking about now, DRM. Once that gets broken, how do we reconnect it?
There are companies out there. I don’t know if anyone’s here, but one of the OMI signatories, a company named MediaChain, and they’re saying, no, we can reconnect it and we can reconnect it both through sort of reputation scores as well as technology like YouTube, Facebook use and reconnecting you start building that up. We are arguably in a pizzagate, post-truth world where it’s going to take some secondary source to say, who are you.

I’m working right now with Intel on a blockchain project to address secondary ticketing to say is this a bot or is this a human being that’s buying this ticket, because if I -- that bot buys it and then resells it, who do you go after, right? So --

MR. JESSOP: So you asked the question, who’s “they.” Well, “they” in this case is the platforms.

MR. HOWARD: No.

MR. JESSOP: Yeah. Well, hang on.

MR. HOWARD: Come on. I mean, it’s --

MR. JESSOP: Don’t argue. Don’t argue with --

MR. HOWARD: -- but who builds the platforms?

MR. JESSOP: -- what I’m -- that’s just the way that the word is being used here. The platform is being built by large tech companies. When people upload media to them -- I’ll come back to you in a moment, Stuart --
they actively remove the metadata before they publish it. And I don’t know how they get away with it because my understanding is that that’s not permitted because that’s rights management information.

Stuart.

MR. MYLES: Thanks. So as well as working with the Associated Press, I’m also Chairman of the Board of the IPTC. So IPTC is a news technology standard body, and one of the things we’ve done over the last few years is we’ve done a study where we take photos and that have embedded metadata. We upload them to various different platforms like Flickr and Facebook and so on, and we look at what is the metadata that gets preserved and what gets stripped out.

So I guess the good news is that most of the -- over the last few years they are -- most of those platforms are starting to strip out less metadata. But most of them -- most of them do still strip out metadata, and I’d be happy to share afterwards if anybody’s interested, links to the detailed studies. So that’s one thing.

The second -- so a couple more points, if I may. One second thing is there are actually legitimate reasons that people put forward for why they strip out that sort of metadata. And, actually, AP also eliminates
certain kinds of metadata from photos. So in our case, we, for example, eliminate location information. So if a photographer is in a war zone, their digital camera records exactly where they are when they took that photo. So we have policies about what kind -- what we do with that metadata. Some of it is stripping it out; some of it is sort of blurring the details and so on. And that’s actually a similar reason why organizations like Facebook have put forward about why they eliminate metadata. It’s because they realize that it can be used to leak information inadvertently that some photographers would have no idea that that’s what they’re doing.

And, then, the third thing is that there is -- there are ways to re-identify photos. So even though -- even though the metadata itself can be stripped out and the photo itself can be edited, filtered, cropped, and so on, there are techniques that you can use to say this is probably the same as this. And, you know, again, I’m happy to talk about it later.

MR. JESSOP: And, actually, looking at some of those reverse image systems, they are spookily good, like scarily good. I wanted to come back to you, and then I’ll come to Bill for a comment, and then I want to move on to the last question, which is what should the
government do about all this. But do come back --

AUDIENCE: But a reverse search is an active search. You have to actively participate in that, as opposed to containing the information in the files for someone to be -- easily be able to identify that file.

There’s a gentleman in the U.K. I know that is working for the music industry trying to get music licensing and to come up with a .BC file.

MR. HOWARD: That’s Benji. He’s probably here.

AUDIENCE: I saw him speak --

MR. JESSOP: He’s on the list to be here today.

AUDIENCE: -- at a forum in California. So it -- I mean, that’s the type of thing where the authorship is the only one that can put that information into the blockchain. It goes into the blockchain at the beginning when it’s pushed out onto the internet. And that’s something, I think, that would really help because I personally believe that you’re saving so little file space by removing the metadata, which is Facebook’s supposed reason for doing it, but they’re purposefully pulling out the authorship information out of that.

So...

MR. JESSOP: Mr. Rosenblatt, sir.

MR. ROSENBLATT: Hi. Yes, I’m Bill Rosenblatt from GiantSteps consulting firm in New York, and whenever
this issue of identification bound to an asset comes up, I’m always surprised, if not shocked, at the lack of mention of watermarking as a way to solve this problem.

MR. JESSOP: I think I mentioned it once.

MR. HOWARD: It came up, and I just said DRM.

MR. ROSENBLATT: Watermarking is not DRM.

MR. HOWARD: Okay, well, what do you mean, Bill?

MR. ROSENBLATT: Simply embedding an identifier into an asset. DRM is controlling access so that you can’t --

MR. HOWARD: Through an embedded --

MR. ROSENBLATT: -- do certain things.

MR. HOWARD: Okay.

MR. ROSENBLATT: No, no.

MR. HOWARD: So what do you -- go ahead.

MR. ROSENBLATT: I’m actually tired of having the water -- is watermarking DRM argument, so we can take that outside if you want. I do have boxing gloves in my luggage.

The point is that, yes, there is some effort and cost involved to embed data into an asset, and then there are certain types of assets for which that’s not particularly effective, but I’ve seen a lot of discussion about blockchain techniques. You know, as you know,
George, I’m active in the Open Music Initiative.

And a lot of these solutions like dotBlockchain and mediachain and so forth, nobody’s talking about watermarks. Watermarks are a way of forcing the identifier to travel with the asset so that it can’t be stripped easily. Let’s say easily. So I just want to put it out there that that’s something that ought to be talked about more.

MR. JESSOP: I completely agree. I mean, watermarking’s a very cool technology. It works very well in many cases. I would point out in the music industry there’s a movement towards what they call single digital master, so it would be a single, very-high-resolution master from which all other distribution copies are derived.

So whatever watermarking you’re going to put in, you’ve got to put it in at the very early stage, which means it’s got to be inaudible and not affect the quality, even at the very highest quality levels, which are now stratospheric. And that’s a really tough nut to crack and a very tough nut to prove to people -- because you can’t prove a negative -- that they can’t hear it. But that’s probably a rabbit hole for the purposes of this discussion, but it’s one we should certainly mark as being worthy of further discussion.
MR. ROSENBLATT: Right, but the other point that I just want to make quickly, and I agree with everything you said, is that the beauty of something that you embed as a watermark is that it’s unambiguous because you put it there.

MR. JESSOP: If there’s some data that’s persistent that it points to.

MR. ROSENBLATT: Right, but the -- I’m contrasting that with something like a reverse image search or a fingerprint which is not 100 percent accurate. It’s often good enough, but sometimes it’s not.

MR. JESSOP: The testing I’ve done, the false negatives in fingerprinting are -- on the good systems -- very low indeed. It’s certainly on the same order as the watermark do, right. I should have said at the beginning I reserve the right to shout “rabbit hole” if we’re about to go down one, and I’m about to do that. Watermarking, rabbit hole. Conversation over coffee, by all means.

I’ve got a couple of minutes left. I wanted to go down the panel and ask what should the government do verging on the spectrum from run systems, make everyone do it, and get out the damn way. What should the government be doing? George.

MR. HOWARD: Educate, market better. There is
a fundamental lack of understanding. I see it every day
in the classes I teach at Berklee and at Brown at the
creator level about what rights they have and they don’t
have. I’m not saying that that is an easy education
process, but they need to endeavor to do a better job of
it.

And then -- and then they need to enforce
contract. And that’s it. And then they should just stay
the hell out of the way and move towards a place where
there is fewer licenses, statutory licenses, because we
have to move out of the modeling to measuring. We have
to move to measuring. The licenses are an artifact of a
modeling society. As we move to a measured system, the
highly statutory licenses should have no place.

MR. JESSOP: Okay. No longer than that, Mark.

MR. ISHERWOOD: I think broadly I would agree
with what George has said, which is a rare thing, but the
only --

MR. MANEPALLI: That was going to be my line.

MR. ISHERWOOD: Okay. The only -- the only
caveat I would make to that is that there is the
occasions where governments can actually do some sort of
metaphorical banging heads together to encourage the
adoption and development of standards. I think one of
the difficulties with this is that as we all know this is
a global issue, not a country-specific issue. And for
individual governments to do separate things is actually
going to get in the way. So there’s a very important
coordination and cooperation activity that has to go
along horizontally between governments to make sure that
individual activities don’t start to get in the way.

MR. JESSOP: Thanks.

Giridhar, briefly.

MR. MANEPALLI: Like I said, I completely agree
with George on this one, and this is the only thing that
I agree with him today. And -- but I just wanted to say
that this conversation that has -- the discussion that
has happened so far is slightly polarized towards rights
management, but the -- but the importance of allotting
identifiers and associating identifiers with digital
assets is important, not just for license management and
rights management, but also for a variety of reasons.

In the case of movie industry, it could be
because of the identification of the viewership, for ad
placements; it could be because you would want to
identify the devices on which the movies could be played.
There are myriad reasons why you want to actually
associate an identifier at the time of its creation.

And we have seen this -- seen similar kinds of
challenges in the scientific data sets area where if you
don’t associate an identifier at the very beginning when
the data set is created, there is a decay in the amount
of knowledge and information and context that could be
associated back with the digital asset. So I hope we can
move towards a world where the creations of identifiers
are -- have no overhead, and therefore they are created
at the time when the digital asset comes into existence.

MR. JESSOP: Very briefly, Stuart. Ten
seconds.

MR. MYLES: So there’s technical solutions for
things like identifiers and formats for things like
RightsML and ODRL, which I’m sure will be mentioned
later. There’s business needs that players in the news
industry want, but the problem, I think, is that nobody
really wants to make the first move because they’re
worried that they’ll adopt the wrong set of technologies
or standards and so on. So could the government bring
organizations together to help them figure out a way to
make a move into proper rights management that eliminates
or modifies some of that risk?

MR. JESSOP: Very briefly.

MS. STAUDT: Very briefly. I just think
encouraging companies and helping them find ways to
effectively get the resources in order to put forth some
of these unique identifiers and implement them, you know,
that’s as simple as it is. Help corporations put these
in at the beginning when they are creating these works.

MR. JESSOP: Thank you very much indeed.

Ladies and gentlemen, would you join me? Thank
our panel. We’ve got to the end.

(Applause.)

MR. JESSOP: There were a couple of responses
came in over the living airwaves. We need to have
digital contracts for any business or action in order to
protect rights. So there’s digitalization of the
contracts.

And a clarification on EIDR is any party can
register for a unique ID if they’ve got a business need
for it. So that’s an aspect to what we were talking
about.

Thank you very much. We’ll move on.
Registries and Rights Expression Languages:
Once works are identified and described consistently, how is information about rights ownership organized into usable registries, and how is that rights information expressed in a standardized way?

MR. GRIFFIN: Okay. We’re the second panel. We’re picking up the baton in a relay race of some kind. The first panel was, of course, focused, as it was, on identifiers. We’re speaking more broadly about registries and rights expression languages, and so we make the assumption that the thing has been properly identified, that the ambiguity has been rung out of the system, and that then there is information to be recorded and enumerated.

And, so, the question before is how, not if, we organize rights ownership information into usable registries. Now, I’m not going to be that strict on the issue that it’s rights ownership information because I think there is a more broad sense.

Greg, I know you’re looking at things a little more broadly than that. And, actually, I think of it as
a rather broad category. Once you have a lynchpin identifier for something, you can then, of course, have many spokes off that hub, and rights ownership information is but one of those things. But we are going to talk about how we express that rights information -- or whatever information -- in a standardized way.

When I was researching this panel, I noted that Ryan had referenced a tweet that I thought was a kind of theme for us, and that was that it takes a pretty good meeting to beat no meeting at all. So I thought the panel did a good job of giving us a pretty good meeting, actually a very good meeting. And our goal is to try to keep that up so that you don’t wish you were someplace else. So we’re going to stay on that theme.

And I’m going to introduce each one of these panelists briefly, and then we’re going to move on. So Nathan Lands is here from Blockai, and there he is the CEO and cofounder. Nathan, yeah, raise your hand. Good, people can see that.

Bill Colitre from Music Reports is the vice president and general counsel there. He heads the royalties services division and leads their business development team.

Ryan Merkeley from Creative Commons is the CEO at Creative Commons, but more importantly, he calls
himself dad, geek, and barista, and sort of -- amateur barista, likes open things, which he terms as, for example, government or diners. So I think that’s rather good.

Greg Cram is here from RightStatements.org, and they have 12 standardized rights statements for online cultural heritage. And they are funded by the Digital Public Library of America and Europeana, which makes it a really interesting project. And the things that you’re working on are really for the benefit of mankind, no question.

Jeff Sedlik is here, and he is the cofounder and the president and the CEO of the PLUS Coalition, but in addition, he’s quite the creator himself. And, so, he is a professional photographer, and he makes films and other things like videos and so forth and so is quite the creator.

And then last but not least we have Greg Fioravanti, who is the vice president of business affairs at Discovery. Lest you think that he is a geek or a quant entirely, he also acquires content and commissions content for Discovery, which makes his job a doubly interesting position, I think.

So, okay, I want to pick up a thread from the first panel because I thought it was rather spot on to
have an example that meant something. And, so, I’m going
to ask Jeff Sedlik to talk a bit about photography
because there were some issues that came up from the
audience, and it’s an interesting example for us to use.
And, also, I note this because Jeff is right in the
middle of bringing about a project that isn’t quite
public yet but will be, and so I think there are some
special insights there. I know apropos to the first
panel, he’s working to identify photographs which today
do not have so much a common identifier to them but also
is embarking on including a rights registry with that.

So, Jeff, could you tell us a bit about the
PLUS Coalition and the work you’re doing on recording and
enumerating photography and other graphics and images?

MR. SEDLIK: Thanks, Jim. So the PLUS
Coalition is -- let’s see, I’m a lot -- I have a lot less
hair and a lot more gray hair, and I think I’m about an
inch shorter than when I started on this. I was at a
Copyright Society meeting sitting with Marybeth Peters
and David Nimmer, not two people who you would think were
the most forward-thinking on technology, but they -- what
they mentioned was that if the photography industry
doesn’t step forward and catch up with other industries
in terms of identifying creators and owners and works and
rights, it’s going to be a dead industry, you know. And
this was about 12 years ago.

And, so, at that point, actually through a suggestion and in cooperation with the Copyright Office, we began to put together a nonprofit coalition of stakeholders -- the creators of visual works, the users of visual works, and the cultural heritage sector -- all coming together into one organization to address identification, to create standards to describe the meaning of various terms that are used to create the beginnings of standards, to communicate rights information when it’s passed around in contracts, however it’s messaged, whether electronically or otherwise, and then to use that information to then proceed to build a registry that’s not run by the government, that is run cooperatively by all the stakeholder groups who depend on it.

And, so, this is called the PLUS Registry, and it actually satisfies what was talked about earlier. It’s aimed to satisfy that, which is identifying people, things, and rights. So you can register yourself and your company; you can register your photographs, your paintings, your illustrations; and you can register your rights transactions. And we have the foundation for the ability to communicate rights between machines.

The first step, obviously, was to create those
standards, so we dedicated four years to bringing people together. We had participants from 34 countries. We had 1,500 people from various different organizations. Organizations like Creative Commons participated in what we were doing. Stanford, the New York Public Library, all the different photography groups, various political -- or let’s say various governmental agencies. We started simple, and we said can we create a glossary that defines terms that people actually use when they are communicating rights information to do with visual works. And we said let’s take 1,500 words and see if we can get everybody to agree.

So we created an online system. It’s kind of like a -- we created this system so that everybody could sign in, look at these words, and basically create -- I guess you could call it taxonomy -- we call it a glossary for public consumption -- of all the words. And we applied identifiers to all those words. And we made a hierarchy of all the different types of media that exist in the world. And we had teams of volunteers from very interested entities working on this. And then we went on to create common package of usage rights.

We’re not talking about applying any value to this. This can be free for people who want to share their work in the same way that Creative Commons provides
the ability to identify a package of rights that you want
to grant to anyone who wishes to use your work. We take
that to another level, which is applying actual more --
either broad or granular rights information to a license
or to an offering, and we support Creative Commons as
well.

So once -- with our standards in place, we then
began raising money to build a registry system. And when
I call it a registry system, it’s actually a system
that’s designed to connect all the registries around the
world, and any system that holds information, we want
those systems to be interoperable, to be able to
communicate with each, and especially registries of
visual works, where you can search one registry or one
database and it will search all registries connected to
this network, to this rights network.

And that’s what we’ve set about doing, not
creating one centralized registry, but creating a system
that connects them all. And, importantly, as a
nonprofit, that’s impervious to buyouts or takeovers, so
that one media company can’t come in and buy the whole
thing. And, also, we’re not dependent on government
funding because governments change, as we’ve all seen
recently, and governments can pull funding. And that can
-- and governments can shut down registries if they don’t
like them.

So this is independent of any influence by any one stakeholder. We have a board of directors that has one seat for every sector involved in creating, using, distributing, or preserving images, and they all have to be nonprofits, so you can’t buy your way onto the board. So we took some time to insulate ourselves from undue influence and then proceeded down this road of identifying people, things, and rights.

And we’re mid-development now. We’ve got a system that’s online with people registering. We’ve got registrations from 150 countries or so. And we’re continuing to build a piece that allows you to register assets, and then we’ll come to the piece that allows you to register rights information, but the idea is that wherever you are in any country you can find the rights information associated with any visual asset that you can find.

We’re also working in cooperation with the Copyright Hub in the U.K. -- hi, Caroline -- and fully support what they’re doing, of course. And we view it as different pieces of the puzzle that come together that all need to talk to each other to solve a global problem. You can’t create a U.S. registry and expect that to do the trick. You can’t create a purely U.K. registry and
expect that to do the trick. You have to tie them all together.

So that’s what we’re involved in. We’re mid-stream, and in terms of tying it back to the previous panel, we use identifiers. We created a system of identifiers, but we also support ISNIs. We support any different kind of identifier you want to put into this system, and then we have a -- what we would call an identifier unification layer that allows you -- that maps all these identifiers to one spot.

Just answering one question that came up on the last panel, which is, is it illegal to remove copyright management information. No, it’s not illegal. It’s only illegal if you do it with the intent to induce, enable, or facilitate infringement. So you can strip that information out of there.

Technically, if you were doing it with the purpose of overcoming some kind of protection -- technical protection measure, yes, but the reason that these companies are stripping it out is they need fast page loads time. They want to sell ads. They want their ads to show up quickly, and even though every image only holds a little bit of information, it very much slows down the whole system and reduces revenue and profits and margins by having so much metadata and images.
Now, I’m Mr. Metadata, so I support keeping it in there. I’m on that IPTC working group that Stuart is on, and it’s critical that that metadata be retained. I don’t want to hog the panel here, so I’ll --

MR. GRIFFIN: Well, no, it’s a good jumping point because to the right of you, of course, is Nathan Lands, and he’s working to democratize copyright registration. And he’s using the bitcoin blockchain, I believe, to record that information. And, so, Nathan, make the argument that Jeff should be working with you and recording this information on the bitcoin blockchain and that it should be democratized in the way that you’re planning to do and doing at Blockai.

MR. LANDS: So I’m not sure I would make the argument that he should be working with us right now. I mean, we’re looking to, you know, get creators to use the platform, to begin with. That would have actually been my question for Jeff, was I was curious, like when we started building Blockai, I looked at a lot of different copyright registry systems that, no offense, but I didn’t see any good products that, like, as a creator I would actually use. You know, there is no company building like a really good copyright registration system or copyright search or anything like this.

So, I mean, I wouldn’t -- you know, I would
love to learn more about it. I really don’t know that
much about it, but, you know, right now, we’re just
building a platform that’s like kind of like a one-stop-
shop for copyright. So --

MR. GRIFFIN: I know --

MR. LANDS: As soon as you -- you know, the
idea with what we’re building is as soon as, you know, a
creator creates something with whatever creative tool
they’re using, automatically we basically kind of like
notarize in the bitcoin blockchain a record, which is
like the decentralized part of it.

And our model is kind of like a hybrid model
because to have a good user experience and to prevent
fraud, you also need some part of the system that’s
centralized, and then the copyright claim itself is
decentralized. And, so, the idea here is that you’ll
have a reputation on what’s code named Blockai, which
we’re -- you know, that’s the code name for --

MR. GRIFFIN: It’s a code name?

MR. LANDS: Yeah, for now, yeah.

MR. GRIFFIN: Well...

MR. LANDS: Yeah, we’ve raised quite a bit of
money that we haven’t disclosed yet from some very
powerful people and will be rebranding and announcing
that early next year. But we launched the first version
in March this year to not too much fanfare, but we got some attention, TechCrunch and whatnot. We relaunched in July, and since then, we’ve been growing about 230 percent month over month since then. And that’s mostly through integration, so we’re building -- you know, we build integration. At first, you basically just use the website and you’d put your images on there. We’re starting with images, but technically it works with anything. And then we started building integration.

So we built integration with Twitter so you can use a hashtag and you automatically claim your copyright. We tweet at you a link to the copyright claim, and that’s been going pretty viral where people will see this and then they’ll -- they’ll try it out. And they’re like, what does that mean, I can claim my copyright for this image, and then we -- as soon as we did that, we had lots of requests for building it for Instagram and Lightroom and Photoshop and all that. So we’re really seeing all of that in the next three months, most of that.

And we launched Instagram about a week ago, which that was -- or I guess it was two weeks ago right now. But -- and since then, things have been going up a lot.

MR. GRIFFIN: It sounds like you share Jeff’s fear that government ought not be involved in these sorts of things.
of efforts or adds little to them.

MR. LANDS: I don’t know. We’re still figuring that out. Like, I mean, I’d never -- you know, I would say that out of everyone, probably everyone here, I have like the least experience in copyright. We started building the company -- you know, so when I was a kid, I mean, I grew up in a pretty poor family in Alabama, and I made money as one of the top players on EverQuest by selling virtual goods and creating these things, and that really like changed my life.

I went from, like, you know, my father was a drug addict and I had a very hard upbringing, and the money I made from being a kid and being able to make money on the internet, that allowed me to travel the world. I’ve got, you know, a great life, I’ve had money my entire life since then and never had to work for other people.

And, so, for me, like part of it was just thinking about the future as, you know, jobs continue to change and, you know, lots -- you know, lots of people are going to lose jobs in the future, and I think that one thing that’s not going to be replaced for quite a while is -- maybe never, but maybe 100 years, I don’t know -- is creativity.

And, so, that’s where I started, you know,
really getting passionate about building this is building
the infrastructure where people who create things can
properly be, you know, incentivized and rewarded for
their work, which I think right now is not really
happening. And there are companies like Facebook and
others where their incentives are not really aligned with
the caring about that because it would actually be bad
for them to care about that. And, so, we’re trying to
build the infrastructure for, you know, people to start
caring about copyright again. And, yeah.

MR. GRIFFIN: Well, you know, I think Blockai, that would be a great name for -- in a James Bond film probably.

MR. LANDS: Well, yeah, I mean, it’s also because the blockchain is only one aspect of what we’re doing, right.

MR. GRIFFIN: Gotcha.

MR. LANDS: And also for creators, it’s a little bit -- anything blockchain-related like kind of just like goes over them and they’re -- you know, it’s like one part of what’s interesting to them, so...

MR. GRIFFIN: Well, Bill -- Bill Colitre, you’ve got a unique platform there at Music Reports that you’ve put together. You want to talk a little bit about how you’d approach the same problem from a Music Reports
aspect? And, again, you know, we won’t tie you to the word “music” because it’s given you deep experience, but, of course, you’d be willing, I know, to tackle the problems in photography or in any medium.

MR. COLITRE: Yeah, sure. And by the way, it’s one of the best descriptions of how blockchain can be used I think that I’ve heard articulated yet, so congratulations. That’s really cool. Thank you for turning that --

MR. GRIFFIN: Oh, not a problem.

MR. COLITRE: So Music Reports is primarily based around a registry, this Songdex database, which is, at this point, the largest and most current database of music rights and related business information in the world. And it did so as a private entity, and it did so without any motive other than the profit motive. It wasn’t government-sponsored; it wasn’t particularly advocated or loved by the rights owners themselves. But one of the -- you know, the problems that we’ve described here is that asking creators to affirmatively identify creations at the time of creation is a very challenging thing, which is a little surprising.

I mean, for a very, very long time there’s been a tradition in painting to sign the painting when you’re done, and then, of course, you know, there’s arguments
about whether that’s even fair. Oftentimes the signature
would be the name of the master, but many people
collaborated on the work, for example.

But asking, you know, a poet to stop and mark
down everything that they’ve, you know, identified about
their work at the time of creation is almost impossible
and, you know, scaling that up to all the creators of a
major scale audiovisual work is extremely difficult to
imagine without a profit motive, right?

Asking creators to identify things
affirmatively when there’s, you know, such a lack of
education about these very complex data standards, for
example, in the beginning is like pushing on a string.
It just doesn’t work. But if you can pull on that string
by bringing the creative works into a registry where
there’s a, you know, a commercial incentive for them to
do that, that can be effective, and we’ve proven that.

Music Reports began with, you know, the clutter
of insufficient identifiers that exists for sound
recordings and musical compositions. Musical
compositions, of course, are not digital works in any
way, shape, or form, and so there’s -- and a special case
there with respect to, you know, photographs and other
things which are often inherently digital now. But then
attaching those to the inherently digital works mostly
nowadays that are sound recordings is itself a science, and obtaining the information about those assets so that you can tie those two things together is a challenge, right? That’s the two-part data challenge in the music space in particular.

But, then, once you’ve done that and created a registry that identifies those works, then you can draw in rights users and offer them terms in a free and open marketplace for those rights. And one of the cavalier things that you said, Mr. Howard, was, you know, how -- you know, there are going to be transactions --

MR. HOWARD: I only said one cavalier thing?

MR. COLITRE: Well, one of the cavalier things you said was that there are going to be transactions first, and I’m either going to get sued or I’m going to license. And there’s something to that, right?

MR. HOWARD: (Comment off microphone.)

MR. GRIFFIN: Well, I hope it’s not because we have great respect for you.

MR. COLITRE: I hope it wasn’t -- I hope it wasn’t taken that way. I didn’t mean to --

MR. HOWARD: No, no, no, I mean --

MR. GRIFFIN: In the spirit of discussion.

MR. HOWARD: -- it might have helped you out

(off-microphone comment).
MR. COLITRE: Point taken, apology made.

MR. GRIFFIN: Actually, I thought it was a very good observation on your part that these aren’t the priorities of creators. And as a result, they’re afterthoughts, and --

MR. COLITRE: Right. All --

MR. GRIFFIN: -- they’re going to be done -- and, so, I think here’s to you for that, but let it go.

MR. COLITRE: And all I meant to suggest was cavalier about that is that many of the rights users in the world are very, very reluctant to build businesses that can be vulnerable to copyright infringement lawsuits with extremely high statutory damages attached to them.

MR. HOWARD: (Off-microphone comment).

MR. COLITRE: Well, I do work with some of those companies, and I can tell you that there’s a lot of concern about it, but there’s -- that concern is tempered by the --

MR. HOWARD: (Off-microphone comment).

MR. COLITRE: I’m not going to make apologies for them at this point, but there is definitely a concern in the rights user community to be very careful about copyright. As much as many people, you know, feel that they haven’t done enough in that regard, they are very conscientious about it and they try very hard, but this
lack of standards, this lack of data, creates a vacuum.
And, so, I think our collective task here is to try and
find a path for the free market to create solutions
around these things, and I think that that can be
achieved. I think our platform demonstrates that.

MR. GRIFFIN: Greg Fioravanti, you look at it
from the perspective of Discovery Communications, a
pretty big company now and some of our favorite shows to
watch, especially on, say, Friday night. So tell us a
bit about what you go through, not only putting content
together, but managing the rights around that content
with your company’s interests in mind.

And then we’re going to ask Ryan about how that
plays in his world in which I think he decidedly thinks
about it from a slightly different perspective.

MR. FIORAVANTI: Yeah, I think what we’re
talking about here, especially when you’re talking about
elements -- photographs, music, et cetera -- that’s being
put into television shows, is to reduce the bottlenecks
and to allow for the seamless transition and transactions
that occur. And that’s a definite concern and problem in
the industry. You know, from -- on the rights and
clearances side, when we’re deciding whether or not to
put images or music or whatever into a show, you know,
production people will routinely run into a question
about who owns something or what the rights are to a specific show.

And if we can’t get a clear, quick answer, we move on. You know, there’s not enough time to, you know, however great that image would be and however it might enhance the editorial of the show, without, you know, some clear, quick answers, you know, we’ll move on. And, so, you know, I think that’s to the detriment of the creators that by not having availability to that content, you know, in an obvious manner that, you know, the editorial loses out, but also the creators of that content will also lose out.

MR. GRIFFIN: Ryan, 10 million or more websites, I think, rely upon Creative Commons for much of their content, and I know you look at your efforts as decidedly different than those of a large company that might be looking at its interests. Could you tell us a bit about how you approach these issues and think about them?

MR. MERKELEY: Sure. First maybe I just acknowledge that we’re an all-male panel up here, and I hope that we think a little bit about -- and my comments will reflect -- I hope that some different voices will get brought into this conversation.

MR. GRIFFIN: I will note it was women who put
us up here, but I will say they are good -- they are good
women I respect, and I would not tell them how to do
their jobs. So I was in a bit of a quandary there, but
I’m with you, Ryan. I think we’re all with you on that.

MR. MERKELEY: You know, Creative Commons is an
organization that creates a set of licenses that allow
people who hold copyright to share under standardized
permissive terms. And those works have been shared
around the world with every type of intellectual property
you can name 1.1 billion times plus. Our latest count in
2015 identified over 1.1 billion licensed works in the
world.

And what’s interesting about that, and I was at
a meeting in Silicon Valley with a VC there, and I told
him that number, and he said, well, is a billion a lot?
And I thought only in Silicon Valley would someone look
at me say, is a billion a lot of something. But it’s a
fair point. And in the scope of copyrighted works, a
billion is not a lot. But what’s notable is that in
every single one of those cases an individual or an
institution chose to share, which is not the case in
copyright, where it’s automatic.

And, so, I think my opening reference is that
we need to make sure that we’re designing something that
is for everyone because everyone now holds copyright.
Every one of us is a copyright holder, and many of us created works already this morning on our way here with our cameras or whatever. And, so, because of that, because of that nature, this room is actually the minority.

Those who choose to exploit their works are the minority in that discussion, which is not to say that those issues aren’t relevant. I’m not saying that at all. But it’s just to say that we need to make sure we design a thing for everybody -- both those who wish to commercialize, but also those who might not.

And, obviously, our interest is and our focus is on those who may wish to commercialize. We offer licenses that retain the commercial rights for the author but also for those who wish not to. And when you look at the proliferation of content on the internet, it is predominantly that, not that which is retained -- where all the rights are retained.

I thought about a couple of lessons from Creative Commons when George was talking about the incentive structure. And one of the things we learned in the early days was that one of the largest incentives is not commercialization, at least for those who choose us; it’s attribution. And in the early licenses, the cc licenses had a set of licenses that allowed you to remove
your attribution requirement. And those licenses were barely ever used and were deprecated within the first number of years.

Creative Commons will celebrate 15 years, our anniversary, this week. And, so, 15 years later, all of the licenses require attribution because what we know is that creators want it very much. And when you look at the communities where people share content freely, the place where they get into fights is mostly about attribution. If you’ve ever been a Tumblr user and watched what people fight about, mostly they just fight about the time that the work got reposted and then the attribution got lost or left out or scraped out. And those are also the fights on Reddit and also the fights on -- in various places.

So, you know, I think those -- that incentive structure is important. So commercialization, one very important incentive, but also attribution. And the thing we hear more and more is how can I find out where my work went, how can I find out who used it, not necessarily to exert my rights, but just to know because I chose to share and I want to know where it went. And, so, that one comes up a lot.

The other is a comment that Nathan made about work flows, sort of implicit in his comments about
embedding in existing work flows. And one of the things I found interesting in some of the things Blockai did earlier this year was talking to people in the platforms where they are sharing content, even platforms where rights information is either not there or very rarely mentioned -- Twitter, for example.

And, so, I think that’s interesting, and I think the success of Creative Commons relied very heavily on the idea that we were inserted into work flows where you choose to apply a Creative Commons license primarily by using a tool that you already use where it’s embedded -- Flickr, YouTube, SoundCloud, Wikipedia. It’s baked into the platform. You don’t have to go somewhere.

And I think that’s a lesson that we could take away, which is if we want that information to exist and to be shared in registries, we need to go to where the users are and where they are creating and be in those places, rather than saying and now go to the USPTO website and file this form and fill out this information. So I think that’s really important.

The last piece -- I just want to comment on this -- who should lead. I think there is absolutely a place for government to play a role in this. No one worries about the records at the DMV vanishing, and I think there’s a place for a trusted organization with a
legal responsibility to play that. But more importantly, for me, is that whatever we do that it be an open standard so that we don’t have -- that we don’t forget the lesson of the internet, which is that it didn’t really light up until it was baked around open standards where anybody could show up, anyone could build, as long as they had the language and the tools in order for those things to start to talk to each other.

And the interoperable connected web that we’ve had and all of the benefits we’ve received from it came from and out of the ability for anyone to show up, any business, any individual, and know the rules of engagement and know the standards. And, so, if we have 100 competing standards, which would be an understatement of the number that we have today, you know, the old line if you want to -- you know, if you put seven people in a room with seven standards to create a new standard, you’ll come out with eight standards. I think we need to be careful that we have an open standard that we all agree to before we get too far down this road or else it will just be a bunch of competing standards that don’t talk to each other.

MR. GRIFFIN: So your remarks remind me of Daryl Friedman, my friend at NARAS, the National Academy of Recording Arts and Sciences, says artists want cash
and credit, so that double entendre works. I really like your goal. I think what you stated succinctly was a useable commons powered by collaboration and gratitude. So that says something.

Now, Greg, you know we’ve saved you for last in this list here because I’m especially fond of anyone who comes here from the New York Public Library. A librarian showing up in our midst is a fantastic thing. And, so, I want to hear more about these standardized approaches that you’re taking to cultural heritage because they maybe are a little outside of our mission of rights and ownership information, but they seem very, very important nonetheless.

MR. CRAM: Well, and, in fact, that’s exactly what we track. So the -- our library, the New York Public Library, is made up of 92 locations, and we have over 51 million objects in our collections. We’re collecting what much of the people in this room are producing. So we have a lot of assets in our collection. The copyright status of those assets is variable. We’ve been collecting for over 100 years, and we collect all the way from things that are being created today all the way back to stone tablets that have hieroglyphics on it. So we collect a whole variety of things.

And for us, we’ve been digitizing more and more
works. We have about a million and a half digitized assets at this point in our repository, and managing a million and a half assets for us with such a varied copyright status and lots of different issues around those became unwieldy pretty quickly when we were starting. So I’ve been at the library for six years, and my job has been to document -- research and document the copyright issues, the rights issues around assets in our collections so that we know what we can do with those assets in the first place.

So we’ve built a rights database that helps us track who owns what, if the thing is still in copyright, and any kind of licensing restrictions or other kinds of restrictions that have been placed on us. All that information is great. I’m really happy to collect all that information, build that information. We’re doing about 400 items a day at this point, analyzing copyright status around those things, all great information to have.

The problem is that our users are coming to us and saying I see this thing on your website; what can I do with it. And we didn’t have a good answer to that question for a long time. We just didn’t have a way to share the information that we’ve been collecting with them, other than bibliographic data. But bibliographic
data, while nice, is not necessarily relevant to copyright determinations.

So what we’ve been doing with RightsStatements.org, with DPLA and Europeana, is trying to address that question. When DPLA started the Digital Public Library of America, which is essentially an aggregator of --

MR. GRIFFIN: Can I stop you just for a second?

MR. CRAM: Yeah.

MR. GRIFFIN: Because you did spell that out, could you tell us a little about your two sponsors?

MR. CRAM: Yeah.

MR. GRIFFIN: The DPLA and Europeana, because maybe not everybody knows what those two are.

MR. CRAM: Sure. I’m used to library conferences where everyone knows DPLA and Europeana. So DPLA and Europeana basically aggregate metadata created by libraries like mine --

MR. GRIFFIN: But they’re different, right?

MR. CRAM: But they’re different. One represents the European libraries.

MR. GRIFFIN: Europeana?

MR. CRAM: Yep. And DPLA, the Digital Public Library of America, represents libraries in the U.S., cultural heritage institutions in the U.S. So they’ve
been aggregating data about the assets that these
institutions have been making available online. So DPLA
at last count had about 14 million assets in its
database, so you as a user, instead of having to come to
the New York Public Library’s website, you wouldn’t
necessarily know to come to our site to find, you know,
information about a particular topic. You might instead
go to DPLA and be able to search all of the digitized
collections of all the libraries in the U.S.

The problem that we had, though, was of
those 14 million assets that were in DPLA, we spent a
quarter -- or about 23 percent of the words describing
assets, those words appear in the description field.
You would think that that’s probably right. When we
describe an asset, we want to describe it. So it should
be the number one field where most of the words come
from.

As it turns out, that’s not the case. The
number one field where words appear in the Digital Public
Library of America databases is not the description of
the asset but is instead in the rights statement field.
We have over 100,000 unique rights statements produced by
institutions like mine in this database, and for a user
encountering 100,000 different rights statements is just
meaningless to them. They have no idea what that means.
And many of the statements that we see in that database are just incorrect. They’re just flatly wrong, and they just don’t make any sense.

So DPLA and Europeana came together with help from Creative Commons to start to be able to describe the copyright status, one piece of this, in a very straightforward and simple way. So we’re going from 100,000 unique rights statements down to 12. And those 12 mainly and only describe the copyright status of the asset. So when institutions like mine make a determination about the copyright status of an asset, we can pass that information along to our users in a really clear and obvious way so that they can then make a decision about how they use those assets.

MR. GRIFFIN: Well, thanks for the interesting description of the fascinating work that you’re doing. I think it’s really focused on the future of humankind, improving our ability to live.

So I’m curious to ask the entire panel a question and to ask you for your predictions, because really I’m fascinated by the rate of change that occurs, both with technology and with content. And in a way, it’s our goal to throw ahead of the runner, and yet how fast is the runner moving? I mean, I look, for example, at the sound recording industry of, say, 10 or 20 years...
ago, and that amount of audio is uploaded to YouTube before noon on the first day of the year.

And, so, things are changing very, very rapidly, not just as to the exponential increase in the amount of, say, UGC -- user-generated content -- but also the changes that are happening in the computing platform and storage as well. And, surely, we are in some ways bound to commit the same mistakes that our predecessors made 20, 30, 40, 50 years ago in not anticipating the rate of change in our own industry.

I mean, for example, if you ask someone in the sound recording industry how was it that you agreed to the Red Book audio standard that had no conditionality attached to its digits at all, they will tell you that they simply decided that no one would ever burn their own CD, that at these costs it would never happen.

And yet I recently took a spreadsheet and took doubling of power and halving in price and applied it to the first manufacturing plant, which was $140 million and about on schedule. Around the year 2000, people were making them themselves for about a dollar.

So it could have been anticipated is my point, and I’m wondering what you anticipate in terms of rate of change. So, Jeff, for example, how many images -- and already I think your point to me has been, wow, the
number of photographs that a professional photographer, our average client, makes even in a day or an hour is astonishing by comparison to, say, what George sees in the sound recording industry.

So what do you see in terms of volume, in terms of unusual challenges that we have to throw ahead of the runner on to keep up with the exponential change that technology brings us?

MR. SEDLIK: Well, that’s a really good point. You know, it’s nice to compare these different types of media and to -- and in my organization we look to all the different types of media and what they’ve been through in trying to create standards and registries and identifiers. And we learn from that, but they’re very different as well. So you have to accept that there are similarities but also accept that there are very significant differences. Music is consumed in a different way than photographs are consumed. When a photographer goes out for a --

MR. GRIFFIN: Well, technically -- I’ll just interrupt for a second and say they’re not consumed at all. They were once consumed, but there’s no less of them once we’ve viewed them or no less once we’ve heard a song. So we’re not in the business of managing supply against demand and dealing with consumption. We’re now
in a service business that’s entirely different than the paradigm of managing supply versus demand. You know what I mean? That’s how much we’re having to throw ahead of the runner is that the whole industry is an entirely different industry.

MR. SEDLIK: That’s very cavalier of you, Jim.

MR. GRIFFIN: Well, it is. And I’m here to be cavalier and to encourage the kind of clash because I’m mindful that people watch car races for accidents and not for easy trips around the track. So go at it, please. They’re waiting for you to create conflict.

MR. SEDLIK: Thank you.

MR. GRIFFIN: They want it.

MR. SEDLIK: So when I -- as a photographer or a photojournalist or even a wedding or a portrait photographer goes out for the day, they might create between 1,000 and 3,000 works in a day. And for those who are working every day, they could create 20,000 new works each with its own copyright a week, and that -- and some will create more, depending on the type of work that they do. And, so, it’s different than registering for an ISBN, you know?

So when there’s a cost involved in identifiers and you have a photojournalist who makes $30-$40,000 a year -- some make much more; some make less -- they can’t
even afford the identifiers if they have to pay for
identifiers in any significant sum. So -- and then
getting those registered from within your work flow
becomes very important. So Nathan’s point is excellent.
It has to be from within your work flow. It can -- and
that work flow can be at two different spots. That can
be -- and should be -- in the tools that the creator uses
to create. It should only be in the tools that people
use to distribute.

So you need to identify those works before you
distribute, hopefully, and then at least when you get to
that distribution point it’s fantastic to be able to
identify them there. But what we need to do is not
create standards and registries that support our current
working models and the current licensing models. We need
to look to how things are going to be to the best extent
-- to the extent possible.

And in photography, we can see that -- where
that’s most likely going to be is retroactive licensing,
licensing by the number of impressions and clicks on your
image, and you get pennies, and collectively that adds up
if you create works, you’re going to get paid more
because those works are going to be more interested and
more people are going to see them, and you’re still being
paid based on scope of use.
It’s just different than how it is right now
where you go to a stock agency website or to a
photographer or to another source and you might select
from a bunch of menus as to how you’re going to use it,
and then you collect a payment, and then you release the
image. And, you know, that same model almost -- you
know, there’s smart contracts in the blockchain, et
cetera. It’s going to happen a little bit differently.

You know, a really interesting example is I
know one company that works with those celebrity type
papers that just publish -- they publish kind of -- I
don’t want to say trashy news, but let’s just say they
publish at a very fast rate, and they don’t even have
time to license the images, so they have deals with their
suppliers where after the images are used, they submit a
PDF of their -- of what they’ve just published to a
company that provides a service where they scan the
publication or read that PDF; they identify the images
that are in there; they determine how much is owed to the
various companies that are participating, and they pay
them because they can’t license at the rate that’s needed
in order to do this. But everybody does it by
permission.

So these types of new models are definitely
something that we have to consider. We have to -- also
have to consider that, you know, in terms of registries, which is what this panel is about, I think we need to differentiate between a copyright registry and a rights registry. You know, a copyright registry can identify the different parties that are -- that have claims to the image, and that could be the creator or creators, there can be multiple; the owners of the copyright, it can be multiple; the licensors; and often in the photography industry, you can have a thousand license -- authorized licensors for one image. And then licensees wish to be identified as well in terms of the -- they want to claim the rights that they have to an asset.

So you have all these stakeholders in an asset that need to be identified, and in photography, you know, the concept of mailing out, you know, putting the fact I own this image or putting a copy of the image in an envelope, sealing it, sending it out and getting it back in the mail like you would do if you were about to show a script to a motion picture production company for consideration, it doesn’t really have relevance in photography because the -- maybe less than 1 percent of the copyright disputes are, hey, I created this image; no, I created this image; no, I created this image. It doesn’t really happen.

It’s not a dispute about who created it; it’s a
dispute over do you have the right to make use of it. You know, I can stand next to you shoulder to shoulder at Mount Rushmore and we each hold up our cameras and take a picture, and both of our pictures are identical. You don’t have any rights to my image, and I don’t have any rights in your image, but we both own copyright in our images.

So, you know, in this photography space, you really have to -- another reason that it’s different than other media is there are so many variations on the images that you can’t begin to use “embed” codes out -- out there to distribute images rather than actually distributing the images themselves because people are just going to copy the images and distribute the images, and now the tie between the image file and wherever the source of information is as to who owns it gets broken, then you try and use image recognition to retrieve information about the image, to link it back to the lost identifier, and that image recognition is going to go back to all kinds of people who don’t own the image.

It’s going to go back to a version of the image that’s possibly not owned by the person who registered another version. There’s a lot of complexities just as in music, and I know that, you know, we all like to think that our industries are unique in some way, but we -- and
there are a lot of similarities again, but again, in images, when you really dig down deep and you find things like the steganography, digital watermarking, is easily lost as well.

It’s come a long way and it’s very powerful, but it’s easily lost as well. So you watermark; you put your ID in your image, in the header of your image file; you digitally watermark your ID into that file; and then also you have the ability to use image recognition to get back into the ballpark of connecting your image back to your ID, and you have to do it at scale. So it’s not just one person sitting there at a computer going, hey, who owns this? It is a machine talking to another machine saying we have these 500,000 images in our database and we need to know who owns them now in subsecond time.

MR. GRIFFIN: Ryan, you’ve got some thoughts here? Yes.

MR. MERKELEY: Yeah, I mean, I think there are two -- two challenges. And you asked the question, where’s the ball going. And, so, I’ll guess.

MR. GRIFFIN: Yeah, give us a guess.

MR. MERKELEY: And, so, for me, there’s sort of two categories. One is identifying and tracking the provenance of and copyright status and metadata of works
made everywhere, accessible everywhere. And then the second problem is commercialization. I think the second problem is actually going -- doing actually quite well, it’s solving itself. And if I predict the future, it’s a bunch of closed models that -- where you never actually handle the content directly.

You look at Netflix; you look at the movie industry and downloading and streaming and music and streaming and books. I don’t actually own the copies on my Kindle, and like those who want to commercialize are going to figure this out, and it’s going to be largely in closed systems where if you want that content you have to go into the silo. If I look at where the ball’s going, that’s probably that.

The more important or the more interesting thing for us, you know, for me, is about actually how we categorize, collect, and identify the grand sum of human knowledge, which includes those copyrighted, commercialized works, but also includes a vast majority of other things that are not that. And we’re already in a place where the orphans are going to massively outnumber those with parents in terms of the content world if we don’t figure this out because of stripped metadata, because of the free flow of content on the web.

And, so, this is a problem that I care very
much that we figure out how to solve. I think a registry
could do that, but I think we should also remember that
copyright is not the hammer we need to hit the
commercialization nail. Like DRM’s probably going to
solve that problem better than copyright, and it --
frankly, I think it’s doing a pretty good job of it right
now, not because I like it, just because it’s working.
And, so, if you ask the question, where’s the ball going,
that’s where I think it’s going.

MR. GRIFFIN: It’s interesting. I have a
friend in the U.K., Paul Sanders, who runs a company --
you probably know him -- and he says that 80 percent of
the materials that he sees are not worthy of copyright
administration. They simply -- the cost of administering
them exceeds the potential rewards. And by the way, he
calls the bunch of you post-trust solutioners, and I like
that phrase, you know, the idea the trust is gone and the
rest of us are trying to come up with solutions for that.

Bill, I know your company was born out of
adjustment between actuarial copyright and actual. In
other words, the notion that, say, radio usage would be
based on sampling or restaurant usage. And, so, your
company, Music Reports, came up with granular and precise
solutions that grew out of the Buffalo decision as it
related to ASCAP and BMI in the music industry. So
you’ve got some experience with this. Where do you think
the ball is going, and do you think you guys are up to
the task, or is our future more actuarial copyright and
less actual granular counting?

MR. COLITRE: Well, it’s an interesting
question because I think I can draw a line between many
of the ideas that we’ve already discussed this morning.
I mean, as granular as we’ve been able to solve the
problem, I think the scale of it is -- where the ball is
going is ridiculous. Jeff was talking about
photographers taking a thousand photographs a day, but
everyone’s a photographer. My 13-year-old daughter, if
she gets a pair of Snapchat glasses, is going to take
tens of thousands of images a day.

MR. GRIFFIN: To Ryan’s point, yeah.

MR. COLITRE: And any one of them that she, you
know, happens to witness a specific event and it becomes
a famous photograph could be worthy to Paul’s point of
copyright protection. But the vast majority of them
never will. And as much as Mr. Manepalli was suggesting
that we must reduce the friction in registration and
identification as much as possible and build it into work
flows to other points that were made, all of that will
help to make it possible for commercialization after the
fact, to another point that was made, to reliably track
back to the owner of and the correct recipient of
d participations or royalties from that thing.
Someone mentioned photographs in celebrity
magazines that are monetized after the fact through deals
that are set up in advance. That’s, in fact, the way
performance licensing is done in some television cases.
There are many publishers who have deals with certain
channels that are set up in advance to say we are going
to license on certain terms and certain cases, and then
after a period of time, they look back at what works were
actually used and how often, and then the settlement for
that payment is made. Settlement always takes place, you
know, in the future, after, you know, tracking and
monetization has happened. I think what everyone is
after is condensing of that time to improve the velocity
of royalties.

MR. GRIFFIN: Well, I’m committed to a timely
end to all of this, and yet I don’t want you to leave
anything on the stage. So I’m going to start with Ryan
at the end and say take a half a minute or so --

MR. LANDS: Can I talk about where things are
going?

MR. GRIFFIN: Oh, yeah, no, we’re going to come
straight --

MR. LANDS: Oh, okay.
MR. GRIFFIN: -- oh. Did you want to follow up on this in hot pursuit?

MR. LANDS: Yeah, where things are going.

MR. GRIFFIN: Please do, and then we’ll be quick about it, and then we’ll finish it off.

MR. LANDS: Yeah.

MR. GRIFFIN: And let them have a timely move forward.

MR. LANDS: So in terms of where things were going, you said ten years or five years, future?

MR. GRIFFIN: Well, I think, you know, you can pick your time frame. And by the way, in yours, I’d guess 40, 50, but in mine, I’m guessing maybe 10.

MR. LANDS: I think a lot longer.

MR. GRIFFIN: No, I love it. You were born on EverQuest, my friend.

MR. LANDS: I think I’m optimistic, 100, 200 years maybe.

MR. GRIFFIN: And I love that.

MR. LANDS: Or longer. But what I think is interesting with copyright, and the more I’ve been, you know, starting to, you know, get into this and is it -- it’s interesting, in most industries, there’s a, you know, a killer product or a brand that kind of represents that, where if you think of that word, some company comes
to mind, like if you think of search, Google comes to mind; if you think of social network, Facebook comes to mind.

MR. GRIFFIN: By the way, it wasn’t always true.

MR. LANDS: Yeah.

MR. GRIFFIN: There was a time we said AltaVista if we were talking about --

MR. LANDS: Well, yeah, that’s past.

And, so, but today, copyright is not cool. Like young people don’t know anything about copyright, they don’t think of having a copyright. And I think there’s going to be lots of options. Some people don’t want to make money; they just want attribution. Some people want to make money. But I think there’s an opportunity to actually build a product that’s so seamlessly integrated in the things that people actually start caring about copyright.

And that’s the first brand that comes to mind, and it becomes the thing when as soon as you create something, no matter what tool you’re using, that you want to have that, right? It just -- of course you have that. Why wouldn’t you? And you actually start collecting copyrights, right, when you create things. But -- and so in the future I think there’s actually an
opportunity, whether it’s I build that or somebody else builds it, there’s an opportunity to build the brand that represents copyright, that when someone thinks of copyright, that’s where they go. I -- having many different websites and things like -- you know, that’s hard, and so I would love to, you know, pull standards in and figure out a single standard, but, you know, we’ll see if that works.

But, yeah, I think there’s an opportunity, and there’s room for things like Creative Commons as well. I mean, so, I think what we’re doing could really help Creative Commons because, you know, people should have choices. So as soon people create things, whether they want to allow anyone to share it, that could be a default setting with whatever creative tool you’re using, that, like, yeah, sure, tag the Creative Commons on there that people can share this, give me attribution, where I want to, you know, reserve it and make money. So, yeah.

MR. GRIFFIN: It’s a good closing statement. I want you to add your email address.

MR. LANDS: Oh, yeah. It’s nathan@blockai.com. It’s block, A I, dot-com.

MR. GRIFFIN: Okay, good.

Ryan, closing statement; email address, please.

MR. MERKELEY: Sure. Well, I am. So I think
the most important takeaway is that we design something
that assumes everyone is a rights holder, not just those
that want to exploit the rights, and we create tools that
allow people to do both and that we do it in an open
standards way so that there are not competing standards
because this is a problem in the trillions-of-works
scale. We can’t really afford to have that level of
complexity and then expect people to actually use it.

So I would just leave it at that. I think
that’s the most important question, is who gets to be in
that discussion. And having users in this discussion, I
get, is admittedly difficult, but I think it’s really
important and it’s really the charge of those who are
designing these solutions to think about that.

And it’s Ryan@CreativeCommons.org.

MR. GRIFFIN: Jeff, closing statement, email
address.

MR. SEDLIK: So because I’m going to forget, my
e-mail address is js@plus.org, js@plus.org. And, you
know, summing up, I would encourage anybody in this room
who’s involved in creating, distributing, preserving, or
using visual works to contact us and to become involved.
We are an open organization. The door is open to
everyone to participate, to have equal influence, and to
advance the -- both our standards, which are continually
under development, and our registry system to make sure
that it helps everybody concerned.

And I would further encourage acceptance of the
concept that, you know, if — what we’re trying to do is
to avoid a situation where you have a proprietary
registry that then gets purchased by a larger company
that then gets controlled and used competitively against
others.

Now, you know, this country is all about
competition. All we are is a box of information. You
ask it questions about ownership, and it answers those
questions. And all the commerce can happen outside of
that box, but the stakeholders have equal control over
how the box is used.

MR. GRIFFIN: Greg.

MR. LANDS: You can be a for-profit and do that
as well, by the way.

MR. SEDLIK: Yes.

MR. LANDS: Yeah, with a decent ledger.

MR. FIORAVANTI: And I think there are — this
is an interesting conversation. I think the — you know,
the area of UGC and where you draw the line between
what’s in a registry and what’s not in a registry is a
very interesting conversation and one that’s not going to
be solved today probably.
But in the future as, you know, as these registries are built, I don’t think you could go in with the supposition that you’re actually going to be able to predict the future because, you know, things will constantly change. And, you know, whatever is built is just going to have to be adaptable, you know, to the future, to the point where you’re not painting yourself into a corner.

I think that’s one of the things, you know, in managing rights at Discovery we’re constantly looking at is, you know, driving in a direction where we don’t paint ourselves in a corner and put ourselves in a place where we have to redo whatever has been created. And, you know, there’s lots of smart people looking at this, and I’m sure they’ll figure out the ultimate solution to that.

My email address is greg_fioravanti@discovery.com.

MR. GRIFFIN: And remember, he acquires and commissions content.

MR. CRAM: Yeah, so Paul in the last panel said libraries are leading the way, and I couldn’t agree more. In fact, I think we’re leading the way in the way that we share data. The first panel talked a lot about things...
that libraries have been thinking about for a long time: how do you describe an asset, how do you put a unique identifier on that asset. Those are things that we’ve been doing for a long time.

So where we think things are going to go, the way that we share data, is going to become through an open links data model. No one has mentioned open link data, but that’s where we think things are going to go. Instead of having a single silo of where the single registry of rights data live, we instead think it’s going to be living everywhere.

So those kids who are creating lots of Facebook posts today and taking photos, the information about those, the unique identifier that’s associated with that, won’t necessarily live in a registry down the street at the Copyright Office. Instead, it will be online, and it will have to be open in a way that we can all use that data, access that data, and then rely on that data, hopefully, to either make data -- more content available to our users or for many of you to commercialize that data and commercialize the asset itself. But having an open standard where we share that data is really important for us, not only in the short term, but in the long term too.

MR. GRIFFIN: Email.
MR. FIORAVANTI: GregCram@NYPL.org.

MR. GRIFFIN: Wouldn’t it be great if the public library could issue a fine for standards being overdue? That would be great.

Bill, close us out here on behalf of Music Reports with your email and a little statement.

MR. COLITRE: Yeah. I guess I agree with Mr. Merkeley’s claim that there will be multiple marketplaces for different types of works. There won’t be ever one registry, and there probably won’t be even one registry in any particular silo, but depending on the market for particular types of works, there will be marketplaces built around those that are based on registries that are based on identifiers that are necessary for that type of work. And that will create more fluidity in the market, and granularity is achievable in those kinds of spaces.

And that kind of granularity can provide assurance for rights users -- assurance of risk for use and assurance to rights owners of prompt payment.

MR. GRIFFIN: Email.

MR. COLITRE: bcolitre@MusicReports.com.

MR. GRIFFIN: Give them a hand. I thought they were terrific.

(Applause.)

For The Record, Inc.
(301) 870-8025 - www.ftrinc.net - (800) 921-5555
MR. KLARIS: Okay, I think we’re going to get started, even though a few people haven’t quite found their seats yet. I’m Ed Klaris, and I’ll be moderating this third and final discussion, which I think we’re all going to take as the third and final step along the path that we’ve been describing today: identify, register, and now marketplace. And I’ll start by saying that we’ve got the most diverse panel of the morning, which is nice to see. Thank you, USPTO.

And I’d also like to start by saying, you know, one thing that government can do and does do and this particular -- the Department of Commerce does is they track IP-intensive businesses and have done a number of studies that tell you quite how big IP is in the United States. And so in case you missed the 2016 -- the September 2016 update to their IP-intensive industries reports, it was the big -- the big report came out in 2012. From -- as of 20 -- end of 2014, IP-intensive industries make up 38.2 percent of the U.S. GDP. It’s huge.
And trademark being the largest, as you could probably imagine, and copyright being the smallest, but still all immense. And copyright, which has about 5.6 million people who are employed exclusively in the creation of copyright, is the industry of patent copyright and trademark that has by far the most self-employed creative people.

In all the -- in the other areas, it’s primarily corporations that are the creators or the authors in the end, and in copyright, it’s the individual creators who retain their copyright in most cases, not always, and some of the valuable, biggest pieces of copyright IP are things like movies, where studios acquire all rights. But that said, the U.S. Department of Commerce has done a great job of kind of indicating the size and scope of this industry and the kind of importance that a question of what is the digital marketplace potential is really -- it’s very much crystallized in what they do.

And I think we’ve heard some today about those who don’t really care about commerce and those who are creating for creative sake. That’s great. I think for today, for this panel, we’re going to talk primarily about a marketplace, so one where people want to exchange for consideration of some kind or another.
Let’s start by having each one of you -- you’re all -- everybody has the bios. So each one of you just state your name and what it is that’s important to you in very -- very briefly, just so that we can level set on what perspectives you each represent. Why don’t we start at the end, Benji, and work down this way.

MR. ROGERS: Hello. Hi. My name is Benji Rogers. I’m a recovering musician. I spent most of my life making music, playing shows, and I founded a company about eight years ago called PledgeMusic to help artists monetize the creation of their work, like a kickstarter for music but with some other bells and whistles.

And about a year and a half ago, two years ago, I started to try and understand what happened once an artist would leave our platform and go into the digital ecosystem. And what I discovered was shocking and terrifying. At the same time, I also got into the blockchain. I started to read up on it. George’s articles published; he really kind of, you know, paved the way for an understanding as to how this could work in the creative industries. And then I decided to propose a concept around the creation of a media format that would write into the blockchain as it’s updated. And we created a public benefit corporation called the dotBlockchain Music Project, which we’re working on as we
So the concept really -- and the way it relates to marketplaces is that if you have a format, which writes into a blockchain database, you can have multiple databases interoperate with that through a series of plugins. And that’s really the concept that we’ve tried to build. We’ve built phase one; next is two and three. And it does so by applying a minimum viable data standard to create interoperability amongst all the marketplace players. So, yeah, that’s what keeps me up at night.

MR. KLARIS: Is it just for music, or is it for any kind of content?

MR. ROGERS: I think it died. Oh, there we go. It’s for music at the moment. We’ve been approached by multiple other industries to kind of develop the same thing for books and movies, et cetera. Music is the lane I know the best, and it’s the one I think that could serve as the beachhead to get the rest of them through because if you look at the visual formats, they largely -- in particular going into VR, which I think is going to be a huge industry in the next, you know, three to four years, the ability for a VR company to scale on the music infrastructure that’s there today is bleak, to say the least. It’s very, very difficult to achieve.
And, so, if we solved this kind of underlying plumbing issue, then the work can be -- by making each work interoperable and usable across a broad ecosystem, you can lead the way through music. And my goal for the company in its entirety is that the music industry together creates a format and standard and offers its work to the digital service providers in such a way that rights holders are -- ownership is respected, and permission and obligation lives and is hard-coded into the music itself, into the files themselves.

And the removal of rights information from the files would render them basically useless in participating players in ecosystems. So today, we -- and the gentleman from Creative Commons really made an amazing point about the workflow and how that works. I believe that the difference between what was and what is today is that creatives use computers, and the moment that things go wrong is when they export from a digital audio workstation because they create a file which has zero reliability to it. The second I create a .wav file, an .mp3 and I send it to my drunk bass player’s girlfriend or boyfriend, it’s just out there. And the ability to alter all of its genetic information is where things go wrong.

If we were to build a workflow out of the
studio, and I think the same would apply for, you know, Avid Pro Tools as it would for, you know, large video-editing software. If you create a stage in there in which you anchor certain minimum viable data points into the file itself that can never be removed, then as you grow, information -- you know, it all -- it is all bundled succinctly within the file itself. So wherever that file is transported, the blockchain reference to its ownership can always be viewed and verified.

So the point about creating a thousand different databases is very valid. We have, I think, 4,000 unofficial ones; 200 official ones. And we don’t need another one. We need them all to speak to each other. And I believe that a format is the way in which they can do so.

MR. KLARIS: Okay, thank you. We’re going to try to treat this as an introductory statement, just so that we can then get to questions.

MR. ROGERS: Sorry.

MR. KLARIS: We’re going to get a chance to -- no, not to be critical, that was interesting, but, Trent, go ahead.

MR. MCCONAGHY: Hi, everyone. Yeah, my name is Trent McConaghy, and I’m a Canadian that now lives in Berlin. Kind of where I come from is I spent almost 20
years doing large-scale distributed AI systems for
designing computer chips for the likes of Apple,
Qualcomm, Nvidia, so any of these folks. And that
industry actually has a lot of litigation, so
intellectual property is incredibly important. So in the
companies that I worked in before, I did 25 patents, so
after this meeting, I’m going to go upstairs and see if I
can find the physical copies.

Anyway, but I -- yeah, exactly, right? So, and
but in 2013, I really started getting into the
blockchain technology a lot. And what led me there was
some core values, actually. And the core values were
around creators aren’t getting compensated, and my
personal data, I’ve lost the control over it, right? So
those two things. I have many artist friends, digital
artists, et cetera, and they were having trouble feeding
their family, despite having world-class work displaying
at places like (inaudible) and so on.

So my cofounders and I, we started a company
called Ascribe, and we said what if you could own digital
art the way that you own bitcoin. And we pulled on that
thread, pulled on the thread and realized that actually
it was a possibility. And the key was leveraging
copyright, leveraging with the right legals across
multiple jurisdictions.
So we built that starting in 2013, beta 2014, and rolled out. And now there’s thousands and thousands of users, tens of thousands of works on this. Along the way, we found other issues, and one of them was what about linking the works that are out there back to the actual metadata. And, so, we built a complementary tool called WhereOnThe.Net that actually does that. You can actually see the provenance of copies for our works, so you start to get some control over what you did.

But we ran into two problems. One was the flexibility of the licensing. People were asking what about, you know, slicing and dicing; what about fractional owners and all this -- fractional ownership. And the other one was scale. We initially built in a bitcoin blockchain, but they call it bloated and it’s only holding 50 gigabytes, 70 gigabytes, right? I can fit more on a thumb drive.

So we -- in the last year and a half we spent the time solving that by building two things -- taking up protocol that actually extends the best of these existing protocols. We’ve had people from PLUS, from DDEX, et cetera out there. What if there was a unified protocol of all that? Well, it turns out the Copyright Hub folks did that, something called LCC. We took that, and we actually made it blockchain-friendly with a community of
people, about ten different organizations throughout the world, from Mycelia, IPFS, many, many. And now there’s this protocol, the specification, blockchain-friendly called COALA IP.

The second thing is basically what we built is starting with the idea of blockchain but leveraging the great work on distributed databases, MongoDB, et cetera. This is the stuff that powers the internet. And we’ve created essentially a database over the internet. Right now, there’s the worldwide web. It’s a file system for the internet, but there hasn’t been a database, yet we talk about needing structured data, all these things. Well, that’s what a database is for.

So we’ve actually been rolling out something called IPDB -- Interplanetary Database, which is actually a decentralized database. It’s a non -- governed by a nonprofit foundation. And overall, it is basically something that goes to web scale to hold all this metadata, but it interoperates. It’s speaking the language of COALA IP, which can talk to all the other databases. And under the hood, the software that runs it is something called BigchainDB.

So overall, once again, the goal is for compensating creators, controlling my own personal data, and seeing what I want to see with licensing others’
works. So that’s what’s driving me. That’s what gets me up in the morning, to basically help to rewire the internet at a fundamental level with this shared global database for the planet.

MS. KLIEMANN: Hi, I’m Kris Kliemann, and I’m going to, I think, slow it down just for a minute, because I’ve decided that I will represent the book publishing industry, right? Which when we were talking about volume before and the number of photographs that are taken daily, we’re like, you know, the snail that’s going to be mugged by a turtle. And a year from now, when the snail police show up, I’m going to say “I don’t know what happened; it happened so fast,” right?

So it’s interesting to think about. I know Jim said, you know, we don’t consume these things; they’re not used up when we’re done. And books get consumed in a very different way, let’s say, than a photograph -- flip, flip, flip, flip, flip -- through my account or music. But it is changing a lot for us. So in the years that I have been mostly on the licensor side, my goal has always been to be able to create smoother ways. Let’s just say smooth. Smoother ways to enable monetization.

And in the olden days, when I first started, it was having a nice notebook with a precis of an author contract in front of me that said what rights do I have...
and then a set of note cards that said what rights did I license and a boss who would come into my office on a regular basis and say he who sells what isn’t “his’n” goes to prison. Right? So you had to pay attention. That was instilled in me.

And now we do have a big increase in volume, and we do have a digital world where people are quickly creating more and quickly wanting to reuse. And, so, building the tools internally to say what rights do we have and building the tools that enable a re-user to get those rights is a big focus of mine. So I’ll leave it at that.

MR. KLARIS: Sam.

MR. GILCHRIST: Hi, I’m Sam Gilchrist, and I’m the founder of Plura Vida Ventures, which is a rights tech and/or financial settlement company. We’re invested in about three or four different startups focused primarily on video and audio distribution and the settling of the transactions that occur from uses of those types of properties -- or excuse me -- that type of content.

The thing that I am focused on and have been working on is for I guess the better part of about 10 or 15 years it’s both because I’ve worked on the rights licensing side of the house; I’ve also worked primarily
on distribution and now mostly on financial settlement is
how to be most efficient in making all three of those
things work. There have been so many promising
technologies that have come along sort of enabling
distribution from private CDNs to, you know, the
leveraging of the public internet for additional over-
the-top applications that are being deployed to now we
see all kinds of potential around micro-transaction
settlement with blockchain and so forth.

Our focus with our clients has been around
adopting those technologies that make the most sense
inside of our settlement engine. Our technology is
privately available on public nodes to make it easy for
us to integrate with platforms like YouTube, like
SoundCloud and so forth and so on, in order to be able to
keep track of what’s happening with the content that’s
being distributed for our customers and to figure out who
owes who what through a fairly flexible deal management
technology.

The things like DDEX are already exposed to our
platform. It’s a very proprietary -- excuse me,
proprietary key-value pairs and say this asset owned by
this owner, oh, in this particular territory, and so
forth and so on.

The other thing I worry about is the creator
themselves or let’s just say the entitled parties involved in the initial creation process because there’s usually more than one. We tend to invest heavily in the technologies that we build, but we sell at a very low price point because we’re not trying to tax those distribution channels. We know that the problem is massive. We see it in UGC base models; we see it in premium models.

What we’re trying to do is make sure it’s as simple for the widest variety of distributors and content owners so that it doesn’t cost a lot in order to be able to do the right thing. The problem we see is that companies can’t afford to do the right thing, so they do the wrong thing, and they do it often. So that’s kind of where we are and happy to be on the panel.

MR. KLARIS: Thank you.

Caroline?

MS. BOYD: Hi, I’m Caroline Boyd from the Copyright Hub Foundation, and I see I’m down here as the U.K. Copyright Hub, and what we’re doing is an initiative that did start in the U.K. and is based in the U.K. but is applicable anywhere else. And we’re really happy to share any of our findings or anything that we have. What we do is open source. We’re not for profit. And if I use the word “neutral” once, I’m going to use it about
5,000 times because that’s what we’ve had to learn to be.

We do two things. We’re really about making the process of copyright a lot easier, and I think that is our mission. The way we do that, we have a strand which is about creating a forum for people to get together and make it easier. That’s fine, that’s not what’s going to be the topic of today. And also there is a software services strand that I’m going to speak about.

What that is aimed at, and this has been architecture -- when I joined the Copyright Hub a couple of years ago, it was a long way down a road that was started when the government commissioned a report in 2011 on the use of copyright in the U.K. We have been partially funded by government, but most of our funding to date has come from the creative industries.

And I can tell you that if your funding comes from the creative industries, you are not going to build software that is going to tread on their toes. So we have had quite a journey of looking to see what we do that is most useful to them. And where we are is if you can find something on the internet anywhere, whether it’s used legally, illegally, just been put up there, what we want to be able to do is identify it -- the first panel really important to us. If it can be identified in any way, which may be a kind of traditional ID like an ISBN,
an ISLC, it might be a watermark we’ve talked about, or
it might be a digital fingerprint, very important
nowadays, both of those, that have come up before.

Then what we provide is the ability to track
that back to a service. That service could do anything.
The default service for us is that it can tell the
consumer, end-user, whatever you would call them, how
they may use this as the creator wants them to use it or
as the person who’s -- or organization who’s offering a
license wants them to use it.

It’s machine-to-machine, and in this way,
licensing is automatable. So when there is commercial
value -- value is not always commercial -- a lot of value
is about credit, it’s about the two-way communication
between the user and the creator as well. But where it’s
commercial, it means you can automate low-level
licensing, small transactions, and that makes a heck of a
difference. That is an entirely new market that at the
moment hardly gets scratched. That’s a lot of money.
Quite a bit of work’s been done on the size of that
market. 2.2 billion was mentioned in the U.K. I believe
that is over 10 years, so we shouldn’t get too excited,
but that’s significant.

What more should I say about it? No, I think
I’ll probably just say that’s it. Thank you. Sorry, Ed.
MR. KLARIS: Sure.

MR. BARBIERE: Thanks. About 20 years ago, I got involved in a registry that set a very important case study that I think music and many other industries could learn from. It wasn’t more than 20 years ago that you had a phone number that was almost assigned to your geographic location with a fixed service. You couldn’t port it; there were no -- excuse me, there were no mobile devices. You moved, your phone number changed.

And in 1996, I began working alongside a company called New Star, which was a division of Lockheed Martin, who was building a number portability registry that would allow you to take the asset, the phone number that you owned, and begin moving with it. And in the beginning, it was small movements. It was being able to move down the block and take your phone number.

But then it began expanding to today where a lot of what we’re talking about in terms of content and copyright-owned materials, whether it be a photo or an image or a piece of audio, is actually moving through those devices. And there’s a registry underpinning all those devices, and if you think about the billions of transactions that go on hourly through these devices, the registry that satisfies that is pretty impressive.

And we built a marketplace around that in 1997...
called ArboNET, and it was the world’s first telecommunications trading exchange. We built it similar to a NASDAQ-like exchange. We were told that the telecommunications industry would never adopt it, nor would they adopt the number portability system from New Star. By 2004, we were managing 10 percent of all the world’s telecommunications traffic and number portability, and New Star had taken off and today exists as the standard for registries as far as I’m concerned.

And think about, you know, what they have to deal with. They have to deal with multiple technologies, multiple networks, multiple devices, movement, something that started very local and now went national, and now you can be reached anywhere in the world globally.

From that, I was fortunate enough to work with the American Association of Advertising Agencies as part of ArboNET, and we built out the Ad-ID registry, which is still in place today as the registry that allows advertising assets to be tracked through all the work flows within the ad and marketing world.

In 2007, we developed the world’s first music rights management platform called Rights Router. It was the first commercial platform for independent musicians and labels to distribute content to e-tailers. And that led to 2011 when I joined this company Dubset, which is
sort of the long way of getting there. But Dubset’s mission is to take the world’s largest segment of content, music content, which is derivative works, specifically mixes and remixes, that have been unmonetized. It’s the world’s largest unmonetized segment of content.

To give you an idea, I know when people think of deejays they think of a niche market, and it’s kind of a faddish sort of segment. It’s really not. The deejay has been the curator for folks for as long as all of us can remember radio. The amount of content that sits on a service like Spotify is about 4 million hours. The amount of unmonetized recorded deejay content that is sitting out there in hard drives and servers and on rogue sites throughout the world conservatively exceeds 150 million hours.

There’s a massive opportunity that relies around and is challenged by fractional ownership. It’s challenged by territories. It’s challenged by -- by compliance and laws, but we think we’ve solved it. It’s taken five years. We’ve just launched the world’s first platform -- I keep using “world’s first.” I have to stop doing that. We’ve launched the platform that now can take any deejay’s content, put it through a registration identification rights association, cross-clearance.
distribution and settlement process, and allow for monetization across any music service in the world.

So it’s a bit like Content ID and YouTube on steroids specific to just this particular music genre for now.

MR. KLARIS: Thank you, Bob.

Okay. So to synthesize, I think that what this group has said is that there are three components to a marketplace. There’s a system, a process, and data that goes into the system. And, so, we’ve got Sam and Trent who have come up with a database of sorts which have schemas that need to be populated with data, and I think that the Copyright Hub is in many ways trying to help populate those schemas.

And a lot of what we’ve talked about today where you’re populating unique IDs and stuff are about the data and about the process by which you go about doing that, which can be very complicated.

Let’s assume we have -- we’re creating a marketplace that is completely machine-readable, so there’s no human interaction in the transaction itself. Choose one of those three things and just tell us in one word which is the most important -- or three words -- the most important, the second-most important, and the third-most important: data, system, or process to get to a
completely automated marketplace. Three words.

Start -- we can start here. Just three words.

MR. BARBIERE: Thank you. Standards, which is data?

MR. KLARIS: Yeah.

MR. BARBIERE: Okay. Oh, it’s going to be your three words?

MR. KLARIS: That’s one. No, it’s three words. The data, process -- you can define it, you know, but --

MR. BARBIERE: Yes. Standards --

MR. KLARIS: -- standard, process --

MR. BARBIERE: Standards around the data; a commitment to an imperfect process that will improve; and a willingness to adopt beyond that process.

I don’t know if those are the three words you’re looking for, but give it a shot.

MR. KLARIS: Okay. I want data, process, system.

MR. ROGERS: Oh, sorry.

MR. KLARIS: Caroline?

MS. BOYD: Tricky question. I think that -- do you want to just define system again? I’m being too --

MR. KLARIS: System is the actual database itself.

MS. BOYD: Okay, cool, and then data’s what’s
transported, and then process.

MR. KLARIS: The data is what populates the system.


MR. KLARIS: And the process is how you go about getting the data in the system.

MS. BOYD: Then I’m going to go against all my instincts. I am a data person, but it’s the process that’s most important at the moment because the human can still be trusted to make something of the data, regardless of whether it doesn’t make much sense to a machine. As long as that data can be presented to the human. So process, data, system. Process, system, data. Eh, system, data.

MR. KLARIS: Okay.

Sam?

MR. GILCHRIST: I suppose I would say system, and then I’d say process, and then I’d say data. And that seems counterintuitive given the discussions we’ve had, but you said that it would result in a fully automated transactional platform or perhaps even a transactional network. The reason I say system is because when I listened to Trent and I listened to Benji and I listened to Bob/Robert, talk about the evolution of the things they were involved in, and I know about my own
background, having been at British Telecom, spent a lot of time at AT&T, so forth and so on, systems and how they are intended to work, really important.

And what we did in the ‘90s and early 2000s in terms of that sort of big leap in technology and tools makes the ability to construct one of those really arbitrary now. You can decide how deep, how wide, how much it talks, how much it doesn’t talk, you know, without too much trouble, but the fact is is you can do it. So if you have an application you’re intending to do, you can build the system. So you build the system; you take the tools; you put it together.

MR. KLARIS: Okay, thank you.

MR. GILCHRIST: The process -- the process, though, before I -- the reason -- I ranked data last on purpose.

MR. KLARIS: Okay.

MR. GILCHRIST: The process is important to me secondly because the management of this new application as you called it is the whole reason you’re doing it in the first place, so you have to understand how to control the system and work with the other systems that are there. And then the data, the reason I made it last is because you can’t predict. You cannot predict the world you’re going to be in the very next moment you’re in it.
So you need to have a flexible system so that you can
house the data, but you don’t -- you shouldn’t work on
the data first.

MR. KLARIS: Okay, great.

MR. GILCHRIST: And that’s weird. It’s not --
and most applications build the data model, you figure
out the data, then you start building the system. But we
already did that. We actually know the systems. We know
that we generally have an idea of the data. So we should
construct the system first.

MR. KLARIS: Okay.

Kristin?

MS. KLIEMANN: Yeah, I’m going to go -- oh,
sorry. I’m going to go with system first also. First of
all, if you have something you can get all the nasty data
into, you can start cleaning the data. If you get stuck,
as many people do, with trying to wrap their minds around
how are we going to make this data perfect before we
build something, you end up with a long, long time line
that doesn’t serve your purpose.

So did I rank it all? No. Process, okay.

System.

MR. KLARIS: System is one.

MS. KLIEMANN: Process, data.

MR. KLARIS: Okay.
Trent?

MR. MCCONAGHY: So I’ll put process first; system and data tied for second. I believe that system and data, while I work on it, I think they’re table stakes. I think that once you have a flexible, useful system in there, then it allows innovation at the top level, and with process, I really mean about unlocking the assets, getting the users to actually use this thing.

So I think, you know, some of the table stakes for system and data are the fact that it’s actually as decentralized as the worldwide web, right, that you do have the decent protocols to support this. They have the flexibility for the future, right? The web standard, the initial one, was developed in 1989, 1990, and that was 25 years ago. It’s still working and we still use the web all the time. So you can build these systems with the data to be flexible enough for the future, right?

And my favorite example for process is the travel industry, actually. There’s two databases that power it: Sabre and Amadeus, for America and Europe respectively. These have been around since the ‘90s, and guess what, all the innovation is at the UX level, the consumer level, right? This is why we have Kayak as a very great take on UX, which is very different than Trivago, which is very different than HipChat. That’s
what I want for music and books and all these other IP forms.

I want to see the exploration for incentives to -- I want to see smart entrepreneurs and smart companies try to find what is the best way to interact with this IP to unlock the assets. The rest is table stakes.

MR. ROGERS: Hello. So for process, I would replace that word with work flow.

MR. KLARIS: That’s the same. I think those are the same.

MR. ROGERS: As long as we’re -- yeah, because essentially I think that the way that you get to data is through that work flow and process. So I would go process or work flow. I would then go format, which contains data. That way, wherever you move that packet, that data is consistent. And then that leads to a system that I will call marketplace because ultimately if the -- if the objects themselves can become the seeds of the marketplace, then you can grow everything on top. So that’s where I go -- work flow, process, format, which would contain a minimum viable data standard, and then system or marketplace.

MR. KLARIS: Okay. So you can see that there is no agreement on how we go about building a marketplace and where we put our priorities. And these are some
people who think about this their entire lives. I would
have my own opinions.

Why don’t we try all of us? Who here thinks
that system should come first?

(Audience show of hands.)

MR. KLARIS: Who here thinks process? For who
process comes first? Work flow, process.

(Audience show of hands.)

MR. KLARIS: Okay. And who thinks data comes
first?

(Audience show of hands.)

MR. KLARIS: Okay. One data, two datas.

AUDIENCE: (Off-microphone comment).

MR. KLARIS: People create work flow. You’re
saying work flow is the number one, most important thing.

Oh, yeah, but that’s -- okay, so, we won’t get
distracted for the moment. Let’s --

MS. KLIEMANN: Rabbit hole.

MR. KLARIS: Yeah, rabbit hole.

So, all right. Well, then, we all -- we all
see that the audience thinks that process or work flow is
number one. And that’s fascinating because it’s the
hardest thing to solve because we’re dealing with human
beings who need to learn how to do it, create it,

For The Record, Inc.
(301) 870-8025 - www.ftrinc.net - (800) 921-5555
like Sam who are making these fantastic systems, and then
the big obstacle is work flow.

Question. Is the -- let’s take the IPDB,
Trent, your system. What is it that you -- how do you
envision the world adopting it and making it into -- does
it have to be almost a monopoly in order to work? Or can
it be one of many, many and still work?

MR. MCCONAGHY: so to summarize, it can be one
of many. And the best way to think about this is the
history of the internet. So it started with ARPANET in
the mid ‘60s, right? There was one net. It took off, it
took off. You know, it started with 17 universities
throughout the USA, and then, over time, more were added.
But there was a lot of universities in Europe and
elsewhere that wanted to have their own. So they built
their own systems -- CSNET, NSFNET, et cetera. And
suddenly you had these -- all these different networks
that didn’t talk to each other.

That’s when Vint Cerf and Bob Kahn came along
in the mid ‘70s and invented something called TCP/IP, and
you could connect these networks, the network of
networks, which we now call the internet. I see the same
thing with this, right? And there’s a modern equivalent
of TCP/IP for value. It’s called inter-ledger protocol.
It came out about a year and a half ago. We’re deeply
involved in it. And this is the key.

So, overall, we make sure that IPDB itself speaks that language. We encourage others to hook to it and so on. And overall, then, IPDB, we envision as going to be one of the bigger, stronger ones to start with, but we encourage lots of people to build other things that interoperate. We also see, you know, it really is important to think about this as fundamental internet infrastructure, and this is why we’ve been working very closely with the people in the past who have been building the fundamental infrastructure. For example, David Holzman, who built -- who rolled out the DNS, the modern DNS, he’s one of the advisors in helping to run IPDB. This is really important.

So, overall, IPDB is not the one monolith to rule them all; it’s designed, though, to make it really easy for people to build their marketplaces on top, to serve this process, to serve the users, to explore different business models.

MR. KLARIS: Okay, thank you.

Caroline, when you entered into your project to create this sort of unified standard, if I may, what was the ultimate goal? Like what is the goal? And in terms of marketplace, if you will.

MS. BOYD: The ultimate goal in terms of
marketplace was for us to disappear, that just to become one standard that’s used, like DNS. You’ve talked about DNS; Trent, too. It’s just like DNS, connecting up. The standard is how you connect. So any standards would work, as long as they’re used. Any identifiers would work, as long as they’re used. We should no longer be there. It should just be part of how the internet works.

MR. KLARIS: Okay. So, Benji, is there any incentive for private companies that are getting funded and wanting to grow and build and become important and valuable to adopt a standard, or is it more beneficial to them to sort of conquer the world themselves?

MR. ROGERS: It’s vital for them to form a standard. I mean, just in terms of the music and technology investment, it’s dried up. It’s drying up at a rapid rate. Music is a toxic industry to invest in, absolutely toxic, because if you were to try and start a company, it’s almost impossible to begin it by, to your point, doing the right thing, because you are literally prohibited from every which way in doing so.

Just ask any VR startup right now why they have to raise so much money to get off the ground. It’s not the computing power; it’s literally dealing with the entire experience requires music at its core. One of the reasons that I proposed that this should be around a
format standard is because all of the extraordinary data in the world is amazing until you can strip it out and repurpose that file to some other means.

And I haven’t -- and I’m not the smartest guy in the room by a thousand miles. I haven’t been able to see a way in which you can do it in the absence of that. If we’re still sharing our works in .mp3 or .wav or .acc in 2017, something is radically wrong because every time you fix data, I can remove it. Anyone can on any device. And, so, what occurs to me is you can use all those existing standards in a wrapper, literally like a zip container that transports around.

This way, if I’m a VR company, I can go look into what’s in that wrapper; I can request permission to use it; I can be given obligation in exchange for that permission, this is what I have to do. And wherever it goes, it’s then basically expressing what -- what is happening to it in an endless change log in a blockchain. Therefore, government can view it, run a node, you know, keep it going. Copyright offices, the entire ecosystem, can view the open and available data. The private industries on top can keep the data that they want private private. And everyone’s infrastructure, like no one doesn’t operate in this system. If you’re a performing rights organization, a label, a publisher, you
all build a plugin to that architecture. So no one loses in that game unless your goal is to hide and obscure money, which I’m fine with them losing, that’s okay.

And, so, one of the ways is, you know, there’s a UGC challenge there, obviously, but in my mind, if you authenticate into a UGC platform, you’re creating an identity. And then if you basically add to your identity, then if you’re saying -- and the work flows are actually quite simple. This song I’m uploading, is it a cover? Yes. Who wrote it? I don’t know. Who made it famous? This person. Boom, you’ve created something tied to an identity.

Therefore, it can pile in to the original source bundle, which, again, wherever it moves, whatever’s added to it, when Bob’s company is scanning to figure out the deejay mix, that mix is added. And by entangling the people who have to work together in such a way that they can’t not work together is how I think the marketplace evolves.

MR. KLARIS: Okay. Sam, I’m going to ask you a very -- the same question, because I’m interested to know whether -- to what extent you agree or disagree with what you just heard. And let me just put another -- just to clarify, are standards realistic in a capitalistic economy when I think there’s probably some -- I think
everybody would agree that a standard is great because your business can get bigger faster, but is it realistic? MR. GILCHRIST: Well, I think -- thank you. I think standards are a good idea inasmuch as that as trading partners agree that it’s a good idea. I don’t know that the end-user cares whether or not there’s a standard because they’re not really involved in that aspect of the value chain.

But I think that participants who are -- who are either adding value in some way during the initial process of creation or are distributing, exploiting, recovering as a result of the exploitation, I think they certainly can benefit from standards, but inasmuch as their trading partners also will benefit, because there could be better transparency privately between companies that are doing business, individuals who are a part of that.

But the idea of the sort of federated registration is, to me, a percentage -- a potential percentage of the solution, meaning there’s an opportunity to register some types of works. And for them to be registered in a way that is taking advantage of blockchain technology. And the idea that you would use it to -- as a definitive source for ownership and for obligation, I’m not sure about that because the speed of
change, the speed of -- the speed of privately deciding between a willing buyer and willing seller that they’re going to do something different, right, and then that not actually updating the registry. And, therefore, the opportunity for potential, you know, accidental fraud, actional fraud, so forth and so on.

I’m not against it. I think it’s a good idea. I think there should be all kinds of advances around trying to make -- make -- understanding ownership knowable, right, at least to the extent that you have covered for the application of the -- or the use of the content. But being a ubiquitous, you know, sort of solution, I’m not so sure that that actually is really going to be the case for the previous reasons.

Number one, the speed of change around ownership is mind-boggling. I mean, you cannot know that somebody just agreed to allow somebody to do something, and therefore transferred their rights. You just can’t know it that quickly. Could you know it where you set up essentially a wall garden? You literally locked down the network. You made no, let’s say, prospective model available unless it was registered. Then, yeah, I mean, but now you’re privately trading. That’s all you’ve done. You’ve just simply said I’m going to privately trade in here, and if you want to use these applications,
if you want your stuff traded here, you have to agree to use these technologies.

But then there will be another one. There will be a new network, overlaid on the existing infrastructure, that won’t. The law says there can be. Contracts between parties say they can do that. And I think you need to be -- I think that we need to be flexible, and we need to push for, you know, greater control, but we need to be realistic and try to help those who are in the value chain or who rightfully should be paid or rightfully should be asked, you know, be asked and be paid.

MR. KLARIS: Okay.

MR. BARBIERE: Can I add to that?

MR. KLARIS: I think that Trent wanted to ask, and then you can, Bob.

MR. MCCONAGHY: So I’m going to push back on that a little bit on the claim as well as just making sure that everyone has the same understanding of today’s technology capabilities. So in the first part, saying that, oh, you know, if Person A makes a deal with Person B and it’s not recorded, well, that’s the same problem on private versus public versus whatever, right? So making a claim that it’s just on blockchain then doesn’t make any sense, right, to me.
So, overall, everyone who’s participating in the system is going to be incentivized to actually record that transaction in a business contract that is written down in some database, whether it be public or private, right?

In terms of the capabilities, you know, I want to make sure that everyone understands it’s not just about, like, updates of every 10 minutes or something. That’s sort of, you know, the old-school blockchain stuff. Now, you know, it’s actually updates on the order of a second or less, right, where you can actually store all the data and so on.

And the other thing most people might not be aware of, modern technology with blockchain, et cetera, allows you to have privacy within, right? The most famous example is Zcash, right? So I can actually transfer money to someone else, and it’s completely private how much I’ve transferred. Even the validating nodes can’t see, right? So you can have privacy in terms of the value of what was transferred, in terms of the actual rights that were transferred, even the identities of the participants who transferred, right?

This is all public. You can still have a public database, but there can be pieces inside that actually are private, right? Just like with the
worldwide web, right? While the worldwide web is an overall infrastructure that’s out there, there’s pieces that people can’t see because you have protections, you have privacy there, right? So just to make sure.

And, overall, I’m going to really push back at the highest level. You know, I think it’s a really bad idea to advocate for data silos. That’s why we’re here today, because we have this problem where you have Silo A and Silo B and Silo D and so on, and they’re not talking to each other.

And everyone talks about interoperability, and I agree, but you need to actually have the technology to support it. And once we get past there with the technology, once that’s all supporting it, that’s great, because, once again, we can focus on the higher level applications to serve the creators, to serve the audiences, to serve the middlemen, even, to basically discover great content and monetize.

MR. KLARIS: Thank you. That’s helpful.

Bob.

MR. BARBIERE: Yeah, I’m going to -- I want to dumb it down a little bit or take it to a higher level. I think standards are great, but the word by definition, “standards” as a plural, represents a problem when you’re talking about a specific challenge that you’re looking to
overcome. We’ve, in music, thrown a lot of really bright people at trying to solve data challenges. And what we see are -- and where part of that mess is we’re developing standards, standards that we believe will move the ball forward and facilitate change and do all the things necessary to fix some things that were broken. No different than Benji and I’m sure the companies that you’re investing in, Sam, and so forth.

What really is lacking is oversight, and not in a governmental way, but in an organizational way. And until -- until an organization -- and, you know, I don’t want to drive this back to telecommunications, but telecommunications has a union. And through that union, which are all of the competing parties participate for the betterment of a global industry. Until you really have that, and that’s bought into, standards never really take effect. What you have are competing standards. And that’s what we see in music is there’s ISRC, there’s ISWC, there’s -- we’re creating our coding system. There’s three or four blockchains tackling music right now. How do you -- the question really becomes, is how do you formalize a single standard, because until you have a single standard, you don’t have interoperability.

MR. KLARIS: Yeah, okay.

MR. ROGERS: If I could just say as far as the
standard side goes, I tried to pull this back to the simplest conceivable level that you could have it. And when we were on the phone with a door manufacturer, I said every time you export a song -- I was in a studio, and I was watching the export process, and it just came .mp3, and every single field was optional. Not one field was required to get the song out of it.

And that’s when I thought to myself, well, what if you could not exit the workstation -- the digital workstation -- in the absence of writing down the name of one writer, one performer, the title of the song, and a copy of work itself. What if that were not possible anymore? Then what you have is -- and I called it minimum viable data.

So, essentially, you can contact two parties to the work. Are they the true ones in the final stretch of the imagination? No. Will there be other added? DDEX, right? This -- all those standards for interoperability I believe exist. The challenge is at the work flow level you can’t get the basic information in because we’ve assumed that’s too hard in a world where tape -- where people wrote down tape and what happened, you know, on sheets of paper that never made it.

Now, with the standardization of the work flows out of the studio, requiring those elements changes
everything because at the very least you could contact
the person noted as the writer at that moment and say to
them, hey, who were the other writers here. So when I
talk about a standard, what I mean is minimum viable data
for registration in a blockchain database would have two
of the key people in it. Therefore, anything that you
add on top is starting from that.

Now, it can be wrong. That’s okay, but you can
heal the data forward by adding to it, versus today,
which is when I export, I don’t have to put anything in.
I can text a publisher and tell them I was part of a
session that happened at this place, and that goes into a
PRO. So that sounds crazy, but if you think about it, at
its raw level, songs have two sides -- someone who wrote,
and someone who performed.

If we can add that to a title and a copy of it,
the immense power of that block of information -- then
you can add every other type of standard that you want on
top, but you can grow it because at the worst-case
scenario, those who are commercially involved in the
transaction that that work will then have going forward
are contactable, and you can amend forward to get to a
greater level of truth using the existing standards that
have been worked on for years by people way smarter than
I am.
MR. KLARIS: Thank you. I mean, I think that what you hear in Benji’s voice is a sense of, you know, just give us this much, you know, we just need this tiny bit. That’s hard enough to get. When you’re talking about transacting in a marketplace, you may even need significantly more than that minimum, even if that’s a beginning.

Caroline, can you talk about the definitions that go to standards, like, for example, in the audiovisual world, an SVOD right is a subscription video on demand right. What does that mean, and how can you possibly get to a place where the licensor and the licensee inevitably know exactly what that definition is as a standard? And how far away are we from even definitional standardization? What does syndication mean, you know? What does distribute mean? What does all media mean?

MS. BOYD: You must remember that all we’re doing is transmitting that information. In terms of how do we move forward, there are a lot of standards. And when you said there were so many standards we don’t know what to do, I suggest you talk to the two gentlemen over there who work with the Linked Content Coalition where standards can be mapped together into one simple understood message. And that’s the kind of message that
we’re dealing with. That’s what we need to be able to transmit information to the licensee.

The licensor end is always automated. The licensee at the moment is still making a choice. We allow them to make that choice so that that’s got human interaction there. Once we start automating that, that will be a whole new ball game, but let’s do it a step at a time.

MR. KLARIS: So are you in agreement that we start with this minimal viable, and then we --

MS. BOYD: The minimal viable data that Benji’s describing is probably the most critical thing for the music industry because you’re just describing mapping a work and a recording together, which it would be fantastic, just fantastic. I’d kill for that, yeah.

MR. KLARIS: Yeah, no, it’s true. It’s -- all we’re looking for is that nugget, and that nugget would be wonderful. And it also begins to change behavior.

MR. ROGERS: And --

MR. KLARIS: And it’s as soon as somebody’s putting information in, then they’ll get better at putting more information in.

MR. ROGERS: And the key is it disadvantages nobody because if you can’t -- and I’ll talk to the musician level because I’m the guy -- I’ve spent a lot of
time in studios. There is a moment where you don’t want to talk about publishing splits, and you don’t want to do that, you don’t want to kill the vibe in the room. And, yet, at the same time, hey, can you send this -- can you send me a copy of this?

The second that goes out, if the engineer says I need to put a writer in here in order to get this out, or if I’m sitting there -- I just need to put one writer in. The artist has already kind of written into that track level. Then that opens up the ability to put in the bass player. So, then, all of a sudden you’ve got SoundExchange has the ability.

That first kernel there leads to everything else because then what -- you know, DDEXes work around, you know, how to get the music to digital service providers. You can build everything towards that. And that’s really where -- like, that’s not an impossible step at all. It’s just a question of enough of the industry saying, hey, we would require this as a minimum to export from a digital audio workstation. Avid, Apple, everybody, let’s get together and make that happen.

Then, you’ve got a writer contactable at all times, which has the other writers, the co-writers, the co-publishers. So that makes the unit of music itself interoperable. If you make it so you could never remove
the writer or the performer, even more powerful.

But let’s start with the first step of, like, can we say -- and I’ve spoken to labels, publishers. They have no problem revealing who wrote and who owns. They have no problem with it. So I think it’s -- when I say process and work flows there, it could be that -- that utterly simple because to Trent’s point here, that’s how you create a massive interoperability. If you could always contact at least two parties to that song, even if it was the same person.

MR. KLARIS: Thank you. We are just about through, and I want to give Kristin the last word because she hasn’t had enough air time. And I think it kind of works. If you said you represent sort of big publishing for purposes of this conversation, how hard is it for big publishers who pay people to do the job of putting data into book files -- how hard is it to even get people who get paid to put it in and do it well?

MS. KLIEMANN: Mine goes to 11.

MR. KLARIS: Okay. Just give us a sense of, you know, you’ve got literally an organization where someone’s paying their rent to do this. How well are they doing it?

MS. KLIEMANN: Yeah, well, it’s a mess. But there -- I mean, it goes back to when you started talking
about SVOD. I mean, how are we ever going to know what
the future potential monetizations are going to be? And
we learned a lot as publishers by never even having
contracts back in the olden days that said anything other
than -- we used to say print, publish, sell, and
distribute, right? Those were the rights we’ve got.

And then we had to stop talking about print
because it’s not about printing, right? It’s publish,
sell, and distribute. And it’s about publish, not
“privish” so you want to get it out in as many possible
ways for that creator and for your own sake. So you have
to start with some definitions of general rights. And
the minute you get into that conversation, you’re talking
about everybody having a different opinion about what the
rights are and should be exploited.

So we hire companies to do it. We set it up as
best we can. It has to be constantly readjusted, so
that’s the minimum viable, I think, is really important.
And constantly revising to update the data to make sure
that you’re able to move into the marketplaces that will
come into existence, that we don’t know about yet. We
didn’t think VR or AR, you know, how many years ago.

So I think I would vote hard for minimum
viable, put in what you have. There -- publishing has
been around a long time and there’s a set of rights that
exist. And get those in the registry or in the database and move on from there with constant revision.

MR. KLARIS: Thank you. I want -- help me thank the panelists, and thank -- oh, yeah, do we have time for a question?

(Comment off microphone.)

MR. KLARIS: Thank you. All right. Help me thank the panelists, and thank you all for being here, and thanks to the USPTO for putting this together.

(Applause.)

MS. ALLEN: So if I could ask the next panelists to come up all at once, and then we’ll have your presentations loaded and you can come up here.

And just a few housekeeping notes, for those of you online that may be chatting, if you have questions, if you could please say that in the comment -- I have a question for panelists -- that would help us sort of identify what is a question from what is just chatter.

Just in terms of the rest of the format for today -- oh, just come on up.

Once we are done with these presentations, we will open up the exhibit hall and have lunch. So there will be a break session soon.
TECHNOLOGY “CURRENT INITIATIVES”

Short “rapid fire” overviews of some technologies and initiatives, followed by opening of Exhibit Hall showcasing additional initiatives.

MS. ALLEN: If we could all be seated. So our next session is a little bit different. We’ve decided -- we’ve asked a few representatives of current initiatives to come up and just tell us very briefly about what they are doing. And we’re very excited to have them here. We’ll start with Danny and then just walk down the line. If each of the presenters could come up, if you have slides here to talk.

After this presentation, we will then move next door. There’ll be an exhibition hall where people will be available to talk and discuss, and it will also be lunch time. So feel free. There’s a cafeteria nearby where you can get some food as well, or there’s places across the street, and then we’ll come back after lunch for a breakout sessions here.

If you have not yet signed up for a breakout session, please do so by 1:00 p.m. That will let us know how we are going to structure everything. If you’re a
facilitator of a breakout session or a note taker, if you
could come back about five, ten minutes before the
breakout session here we’ll have a little pre-game pow-
wow.

And with that, I’d like to turn it over to
Danny Anders.

MR. ANDERS: Hi. Yeah, my name is Danny
Anders. I’m the founder of a company called ClearTracks.
ClearTracks started a while back. It was originally
something very simple. I wanted to clear the rights to a
DJ mix that was recorded. And as I dug deeper and found
the difficulties and all the different parties that were
involved, I quickly learned that the complexity of
clearing copyright for a derivative work is very
complicated.

Not only was -- could I not easily identify the
rights holder, but there were multiple rights holder,
multiple rights that needed to be cleared, multiple
parties for each right. And I originally started looking
at Creative Comments ironically and thinking, well, this
is a system that allows people to prelicense their work,
basically set their terms in advance for certain,
specific uses. Now, those were mostly noncommercial uses
at the time. But I thought, well, what if you had a
database where people could pre-license their work for
specific terms.

So if you look at things like the PROs and SoundExchange today, they’re essentially by consent decree pre-licensed works for certain types of uses. But for derivative works, there is no consent decrees and there is no established right and no established market. But there is still difficulty in identifying all those rights holders.

So I created this database where people could pre-register their rights for certain types of uses. So that would include things like DJ mixes, remixes, sampling, games, VR, basically what we consider user-generated content today, as well as more formal derivative works.

So in order for people to do that, we came up with this concept of, again, prelicensing is what a lot of people are referring to these days as a smart contract. A smart contract is basically setting your business rules in advance where people can easily or even electronically come in, identify the terms of the contract, decide whether they want to agree to it or not, and conduct a transaction. Once you have all of those things electronically in place, you can actually transact things very quickly.

In order to prove that out, you know, I look at
things like NASDAQ as a market where people can clear things very quickly. I look at Mastercard and the way that they can clear a transaction from consumer all the way back through the banks to the originator of the product in hours or days. And this includes multiple parties. So there is an efficiency that can be had if you can do this all electronically.

So as I built out this smart contract platform, I started recognizing that there is no place I can go to identify rights holders and splits easily. So I built a registry that allows people to come in, register their works, register their splits, and then I also built a monetization platform.

So at this point I can allow somebody who creates a derivative work to monetize it, identify all of the rights holders and pay everybody out basically in realtime. So you don’t have this multiple party, multi-month reporting that’s required because I can identify who the rights holders are. I can do it instantly, accurately, transparently and quickly while preserving the interoperability with existing platforms.

And that’s really the goal, is to create a new efficiency where you can go from monetization to paying out all of the rights holders and clearing the rights almost in realtime without having to go through multiple
parties.

And the platform is built, it’s ready today, people can use it, people have been testing it, and you can see me in the next room if you want to take a look at it.

MS. ALLEN: Great. Thank you so much.

Lee, if you want to come up, we can get your slides ready.

MR. GREER: Sure. Hi, everyone. My name is Lee Greer. I’m the founder and president of NPREX, which is short for the National Performing Rights Exchange. NPREX is an online platform for direct licensing in the performing rights space, both sound recordings and compositions.

Let’s jump ahead here. This is a visual of what we hope that NPREX will become, a network of buyers and sellers in an online exchange. I’m an economist by training, and I think of NPREX as essentially the Chicago Board of Options Exchange with one caveat. The Chicago Board of Options Exchange doesn’t have the Black-Scholes-Merton pricing model built into it so that buyers and sellers can exploit that methodology in determining its bidding strategies.

NPREX has a similar pricing algorithm built into it, although I don’t expect to win the Nobel Prize.
So what we hope to do is help rights holders deal
directly with music users and vice versa.

Today, of course, we have a collective
licensing paradigm that is pervasive. It has its share
of flaws, many of which result in delay, complications.
I think one of the fundamental flaws is that the notion
of voluntary exchange and first principles of economics
have gotten lost somewhere. We want to use this platform
and the technology within it to bring that to rights
holders and music users, and to the industry in general.

MS. ALLEN: All right, thank you.

MR. GUGLIELMINO: Thank you. I’m Peter
Guglielmino, CTO for media and entertainment for IBM.

Thanks for having me.

I just wanted to take a couple of minutes to
give you a quick overview of what we’re doing with
respect to blockchain in M&E. Really, we’ve been
collaborating pretty closely with our research teams.
Out in Almaden there’s a cryptology group, and Almaden
has been working with the studios for probably 15 or 20
years around broadcast encryption and Blu-ray and things
like that.

And what we’ve learned is that there are some
things that we need to understand, and we’ve been running
these design thinking workshops with a lot of the players
across the music industry, across media and
etertainment, to really -- to the point made before to
understand the work flow, to ensure that if we build a
fabric to do secure processing that it meets those types
of requirements.

So let me just quickly go through this. So
we’re looking at trying to understand how to use
blockchain for business processing to be able to do
things in a secure, managed and governed way. And I’ll
quickly just get through some of these things.

So one of the things that we’ve done is we’re
one of the founders of the Hyperledger project, it’s a
Linux Foundation project, open sourced. You may or may
not be familiar with. But it’s a way to provide an
implementation for smart contracts, multiple models for
consensus, and to be able to do this in a highly scalable
way.

One of our colleagues, John Wolpert, there’s a
video on the web that I’ll give you a link for if you
come to the room later on where he very eloquently
describes what the issues are that we’ve discovered with
permission blockchains. So you may be familiar with
unpermissioned blockchains, sort of like the Bitcoin
world. We’re talking about something a little bit
different. Permission blockchains really allow secrets
to be kept within business trading partners, because not everybody needs to know everything that happens within a transaction.

And just to give you the quick two-second or two-minute version of what John describes is when we looked at permissioned blockchains, we found some issues. The first issue was that every peer has to execute every transaction. They have to maintain the ledger and they have to also run consensus. So the big problem that that results in is that it’s really not scalable. You get to have a problem in scalability

And the other thing is it doesn’t support private transactions or confidential contracts. And as we all know in this world where there’s multiple providers, multiple consumers, there are going to be instances where I may make a deal with one party but I don’t necessarily want another trading partner of mine to understand or know about that deal.

And so that manifested itself into us realizing that we needed to separate two different run times, one for -- one around peers and one around consenters. And so there are three separate roles. There’s the endorser, the committer, and the consenter. And those separate run times can scale independently, and most importantly they provide the opportunity to keep secret a certain part of
the transaction.

So here’s an example. This is pretty generic. It obviously would apply to the music industry or any IP asset. But if I’m a radish producer in Chile and I want to sell my goods to an organic market in California, I’m going to set up a transaction with them. But there are lots of intermediaries between myself and that ultimate destination of that -- of those radishes. You know, do I have the bill of lading set up, do I have the shipper defined, do I have insurance and all those things.

Each one of those transactions appear on the blockchain, but only the transactions that apply to those individuals are represented on their ledger. So not everybody sees everything that happened within that transaction, only the parties that have permission.

So I can keep the secret between me and that market separate from the rest of the blockchain transactions. Again, the importance here is if I’m selling radishes to 15 different markets, I may have a special deal with one and not with another. But I still want the other ones to do business with me at our negotiated rates.

So that type of capability is what’s underlining things like the Permission Hyperledger, and the key to this whole thing is really around the
cryptology. And that’s the key that the folks in Almaden are working on.

So if you’d like to get some more information, we can talk about it, you know, later on in the room. But the whole point of this is to ensure confidentiality, to be able to scale this thing and to provide security.

MS. ALLEN: Thanks.

Eugene Mopsik?

MR. MOPSIK: I just have that one slide. All right. So I’m here today to talk to you about something that excites aging photographers and visual artists, and sadly it’s not anything that you’d probably think of.

For the past two years we’ve been actively working to create the American Society for Collective Rights Licensing, goes by the acronym of ASCRL, a not-for-profit collective management organization, a CMO, dedicated to securing and distributing equitable compensation to authors and rights holders for the secondary use of their visual works. It’s one piece in the needed revenue stream in the digital marketplace.

ASCRL is predicated on the belief that rights holders must be equitably compensated for the reproduction, distribution, and display of their works. Many of these uses, especially in the digital space, are currently made without any compensation to the rights holders.
holder. ASCRL will secure a revenue stream for visual artists as compensation for secondary uses of their visual works and will distribute the revenue directly to rights holders and their authorized representatives. Dedicated to minimizing expenses and maximizing the return to creators in an open and transparent manner, ASCRL is the only rights holder managed non-profit CMO in the United States striving to create equity for authors of visual works.

Initially ASCRL was governed by a board of directors comprised of three founding members. One is myself. The other two ne’er-do-wells are in the back corner, Jeff Sedlik and Michael Grecco. Jeff was previously on a panel here. He’s the founder of the PLUS Coalition, a working photographer, long-time advocate for photographers. Michael Grecco is a world-renowned advertising -- primarily advertising and editorial photographer. He is the advocacy chair for American Photographic Artists, a visual arts photographers trade association.

We serve as uncompensated volunteers and we’re advised by an advisory board comprised of distinguished educators, advocates and industry partners. I have to acknowledge the support of APA, American Photographic Artists, who’ve provided ASCRL with the seed money to
date to get us to where we are at this point, and we’re grateful to them for that support.

Other trade associations may represent the interests of authors and copyright owners by joining the ASCRL affiliates counsel, and the board and counsel would be adjusted in size and composition as a need arises.

Our advisory board members are Bill Rosenblatt, who is here today; Jim Griffin, Julie Anixter with AIGA, and then we have an affiliates counsel right now that consists of AIGA, the Society of Animal Artists, the Guild of Natural Science Illustrators, the Professional Photographers of America, American Photographic Artists, and we have a general counsel in the name of Jamie Silverberg.

That’s pretty much it. Again, we’re striving to compensate rights holders for, again, these many uncompensated uses. In the future, we’re going to explore compensation for uses in social media and public lending right to see if U.S. authors are entitled for those payments. Thank you very much.

MR. TSE: I fully understand I’m the man between you guys and lunch, and so I will keep this quick. I’m the CTO of Monegraph, a distributor (inaudible) monetization platform. This project did not start in some corporate office with a strategy office.
discussing how to string five words together, but it
actually literally started as an art project. So
Monegraph was a result of a 24-hours hack-a-thon
between an artist, Kevin McCoy, my cofounder and
partner in this, and Anil Dash, an internet celebrity and
recent new CEO of an important company in the software
field.

And they decided to find a way to sell a .gif
to each other for $5 and using the bitcoin blockchain as
proof that they indeed transferred that ownership of that
.gif. And that’s obviously a commentary on how social
media has completely destroyed everything you’ve ever
done. I was the head R&D at McGraw-Hill, been a long
time coming in digital publishing, single-source
publishing, XML stuff. I know that’s not cool anymore,
but, you know, I was there. And then social media
happens, it’s like, well, that’s all out the door, let’s
start over or not do anything.

But when I saw that project -- and I was not
there at the conference -- I say, well, there’s something
really interesting about this, is that Monegraph is
actually trying to do something for real. And that’s
when I decided to join as a cofounder and as a team and
the CTO of the company to try maybe in a very, very
narrow way around art, around digital art, this very
narrow, little small -- much smaller than photos, commercial photos, music, video, or streaming, because we can see we can actually make an impact.

So this is what we’ve learned. We know that people can have brokers in certain markets, whether it’s Getty or to have the stock market, but when it comes to most what people who are young artists participate in today, they just give this stuff away because they want distribution, they want attention.

On the other hand, you can also keep everything in your wall garden, by that means hard drive. So you keep stacks of stacks of them, all different colors and build quality, and hopefully one day someone comes to you and you do a Word document and you license something and you’ll be one of, you know, five people who have done that. And there are many people to help that five people, but most people it’s in this promotional aspects of it.

So to me it’s a great opportunity to take this particular market and say, is there a way for us to do something where we can take this information or this proliferation and this productivity and monetize it in some way, with a respect of rights.

So essentially what we want to do is to build a YouTube-meets-Paypal for creators. So it’s a way for us
to work on attribution. Again, the standards conversation we’d love to participate and we are currently participating as part of the W3C permission obligation working group. Renardo, who works with me, is actually chair of that group. So we definitely want to do this the right way through the standard body.

But we want to -- and this presentation is about showing you what we have done in this narrow slice way end to end with UI and beautiful things and people actually using them. So we want them to attribute using the bitcoin blockchain as a way to record that that actually happened. We want them to acknowledge ownership, both on the web and linking to it and having a page on the web that you can show that you actually own something.

We want them to distribute it. This is not just about attributing and showing, like, four years later with a piece of paper or a hard drive or some printout of some bitcoin blockchain record. We want people to immediately distribute it, and most importantly monetize it.

This is really hard to do. So I don’t think we have solved it. I think we have began to see how this might come together. And so there’s two parts of it, the registration and management, and the registration also
requires media management. There’s many rights database, some of which I built, that you can’t see the thing that’s being managed. What is this thing that is represented by this string of digits? I don’t know what it is. Can you show it to me? No, it’s the rights, we don’t know what it is.

And so I think media management, what is typically called digital asset management system, or Youtube, is definitely part of that correlation. And, then, more importantly, once you have that, how do you distribute it and publish it in this world of social?

So the basic technology is basically three parts. One is we’re using blockchain in this case. We built a bitcoin-based blockchain as the basic registry of rights. And that’s actually pretty tricky, right, because it’s not just about, you know, I have a thing and here’s a title on the blockchain, one record.

We actually figure out if there’s a way for us to distribute these tokens and say, hey, I have the title of this, which is one token; you have the rights to use it, that’s another token; I have transferred to you the resale right to use the token, that’s another token. So you can imagine breaking down what may be in one contract into clauses, and each clause, the right to resale, right to license, is a separate token. And that allows us to
preserve the ability for you to not license something you
don’t own the rights to resale. Right? Because I can
say, hey, do you have the resale token.

So that’s a lot of stuff going on. There’s
some patent-pending stuff that hopefully I’ll go upstairs
and knock on a couple of doors and hopefully move that
along. But part of that is with these kind of tokens,
you can now license a portion of these rights by looking
at that token as an actual asset you can trade to allow
the opportunity for, you know, retail but also financial
services or buying a bunch of tokens from someone at a
certain fixed priced in (inaudible) kind of way. And by
using a digital cryptography foundation of that you can
enable that marketplace.

And, finally, multichannel distribution where
that’s going to social, which has not really been
monetized, but existing (inaudible) which has been
monetized. There are a lot of opportunities there, and
hopefully we can provide that glue.

Hand Fu (phonetic), this is the result of the
extended art project, which is we wanted to find a way to
explain all of what I just said to an artist. And the
way we learn how to do this is that beautiful user
interfaces that looks and works like all the things that
people are doing on filters, on Instagram, and we have
the express right and the language they understand. What do you want to do? You want to sell it, you want to give it away, you want to consign it into a gallery. Do you want to register it and worry about it later?

What is edition size? Again, this is narrow within art, and it certainly can be -- you know, is this a composition or is it a recording, if it’s ex-centered music and right now is only dealing with art as a way to demonstrate this concept. And you can have a slide going from exclusive work to things where you have limited edition where there’s only a thousand tokens possible to a limited work, which is very similar to a stock photo. And certainly price is alongside with that.

But it’s all summarized in this language, I want to sell this exclusive artwork for $150. The owner can resell and remix. That’s the type of things that when we present it to artists and people in the creative community, it’s like, hey, I get this, I get this.

And with that, we also have the ability to say this is what the end-user will see, or the potential buyer, summarized in a form where we express, hey, this is limited edition, what does it mean, what is edition size? This is actually my work. I don’t draw anything pretty. I do draw a lot of diagrams as a tech geek. So
this is one of the diagrams. Why don’t I just put a
diagram and see if anybody bought it? And Mr. Benji
Rogers bought it for $25, thank you very much. I really
appreciate your patronage. So I can now claim to be an
artist like all the other amazing creative talent that is
using Monegraph to the platform.

Underneath this is two things. For those
that’s interested in standards, it’s actually -- we have
expressed all of these things about editions and remixed
rights in ODRL, open digital rights expression language,
which is currently under standards track development at
W3C. But we also encode this in a blockchain. That I
won’t get into in this meeting. If you want to see it,
come to me during lunch.

But what’s interesting about this is this
is actually a diagram about me pontificating with
Benji when he came to me and said, I like what you did
with Monegraph, you solved the music problem. And I
spent an hour talking to him and I say, there’s no way
I’m going to work with this project, this is insane.
And then after multiple phone calls I drew this
diagram, if we’re going to do it, we’re going to do it
this way. And then many things happened since and
much to the satisfaction of a lot of people tracking
Benji’s work. But this was my time stamp. I don’t know
what the date of it is on here of the day I drew this
diagram.

What we’re working on now is starting to
say, now, assuming you have a registry -- and hopefully
the standardization happens, we’d love to use the
standards -- how do you distribute this thing? And what
we’ve learned is that much like the gentleman from
Creative Commons, the likelihood is that everything is
going to be a closed system of some sort, some sort of
Netflix, some sort of, you know, subscription thing and
Spotify. And that’s all a good thing.

But that may be even better if each artist can
have their own or each creator can have their own
channel, then still retain the rights. So what we have
decided to do -- and this is an experimentation -- is
what we call co-defined media, which is to say why don’t
we give the artists the player architecture, the hosting
architecture. They become completely 100 percent in
control. Derived from the work and the rights that they
have registered, give them the player to share socially,
but when it’s streaming it’s -- it could be uploaded
promotionally as a auto-play video that I spent a lot of
time browsing through on Facebook, but once you click on
it, this -- on the left side here is a film that my
cofounder and artist, Kevin McCoy, made. And this was
covered in his show at the Postmaster Gallery in downtown Manhattan, was covered by New York Times, as a commentary on gentrification.

But that film was distributed exclusively on this custom player that we’re building. We’ll hopefully build more and more templates for journalists, the middle one to be able to build channels that has monetization options built into that and be able to, you know, bring some of those content from Snapchat over to a wider audience, so Snapchat for parents so we can distribute through Facebook and Twitter and other platforms or things we haven’t seen.

So this is something we’re experimenting with with that foundation of registry, what type of media experience is there? Very new, very experiment -- a big experimentation for us. And if you are interested in learning more about, you know, this art project and the extension of the platform this can become, and the doors that this opened for us as Monegraph and me personally, a new friendship I made from Benji, have looked at this tool and say, hey, why don’t we discuss how we can work together.

And I think you will see in the coming weeks and months and the stuff from Monegraph, and also from .bc as an extension of this real thing. So, thank you.
(Applause.)

MS. ALLEN: Thank you all. And with that, we are breaking for lunch.

(Lunch recess and unreported breakout sessions commenced.)
AFTERNOON SESSION - PLENARY DISCUSSION

MS. ALLEN: So it’s time to begin the plenary session, if we could wrap up the table discussions. So if we could have each of the facilitators come to the panel and bring their table card they are going to present. If it’s a note taker, the note taker could come without the tent card. But if -- no, it was just the tent card.

The question was asked, do you need the tent card number? The answer is no, just the tent card, not the table number. So you know your name. Awesome.

Last call. Is Jim here, Jim Griffin?

So welcome back. This is the plenary portion of today’s discussion. What we have asked our facilitators to do is to give a quick summary, three, no more than five minutes, but preferably closer to three, of what was discussed at their table. The issues, the challenges, the ways forward.

What I will do is read out the table topic, let -- and I’ll just go down the row and let each person speak. After that, we will open up the floor and the webcast for any questions. The first question will be, you know, what are your thoughts about these table topics? Is there anything that we might have missed or anything that needs to be elevated, et cetera. So keep
that in mind.

We will then have a few more questions, time depending, and also ask the question of what should the role of the government be in the future.

So that is really the rest of the afternoon with closing remarks from John Morris. With that, I will turn to Jim Griffin, who had the topic of “Who Writes the Checks: Monetizing Registry Efforts.”

Jim?

MR. GRIFFIN: There we are. I confess that the note taker was so very good that I got lazy of keeping track of what we were talking about, but I did try to do the very best I could. But you did a great job.

The topic came up where we reviewed the different parties who could be responsible for financing registry efforts. And so we looked at government models, for example, with the Copyright Office, and yet I think we quickly veered away from it principally because the green paper was relatively persuasive in the past that indicated that they would like for other parties to step in and take care of their particular areas. And so the notion was that the PLUS registry that is being run, for example, would be a fine place to put responsibility for photographs. And, likewise, there could be another registry that took care of, say, photo records, et
And so we quickly got off the notion that it needed to be exclusively government, and we thought deeply about how private enterprise could fund registry work. And we noted that there are all manner of parties ponying up $185,000 a piece to want to run a TLV, a new generic TLV. That’s everything like a dot-com, dot-edu, dot -- so, for example, there are eight applicants for dot-music who’ve ponied up $185,000 just to take on the responsibility of building a dot-music registry.

And so we note that there is the potential of profit and that that has incentivized many to go into the registry business. But where we, I think, settled, if I was to call it like an umpire, was on a hybrid approach that would have a wholesale registry at the center with retail activities at the edge.

And the model that we liked the best based purely on performance, existing performance, is the DNS model, that it gives answers in single-digit milliseconds in most cases. And we theorized that that would be the kind of response that one would need if a registry was to be used for policing the net, for example, that you would need single-digit millisecond responses to interdict purloined materials or whatever was happening on the net.

And that the notion of wholesale and retail
activity best represented what we thought would get this market going correctly; that, for example, ICANN runs a wholesale registry and then there are all manner of parties at the edge, at the retail edge who compete on price and service to provide good registry activities.

And so this is a model that struck us as a strong model for moving forward, and we did see -- I guess you’re going to ask this question again later that the government could be in the position of funding wholesale approaches working with parties, and critically they could be a big part of accrediting those who would work at the retail edge; that this would not just be a wild, wild west of people who would perform as do, say, GoDaddy and others.

We also noted that there is an advantage to a wholesale retail model in that the parties operating at what we would call the retail edge needn’t be for profit. They could, for example, with DNS, likewise be universities and non-profit organizations and others who could operate that retail edge in competition with parties who are for profit, as happens with the DNS system.

So it’s probably just to conclude that we liked the DNS model, the way it performs. It’s a good example. We think it’s a good example for thinking about going
forward.

MS. ALLEN: Thank you, Jim. Next up we had Bill Rosenblatt, who also combined with Ed Klaris. So it was a joint -- no, I’m sorry, Ed combined with Paul, you’re right.

So the question was what standards for rights metadata are in development now, and what is their potential?

MR. ROSENBLATT: Okay. Hello there. So what we did was we went around and kind of gathered the wisdom of the table about different segments of the copyright fields, and what metadata standards there are in that segment for rights and how is that standard doing, how is it faring, are there systems that use it that are up and running and so forth.

And the first thing to sort of realize or to contextualize this properly is that there are blurry lines between or among metadata protocols that use that metadata and registries that use those protocols and that metadata. And so you might have a metadata standard that is used by and better known as a registry, just as an example.

So with that in mind, I’m just going to go down the list of what we discussed. And this is going to be an alphabet soup for those of you are not wallowing in it
as some of us are on a daily basis.

In the cultural artifacts field, as exemplified by the New York Public Library, they’re working on something which has yet to be named, which is a rights metadata standard for cultural institutions such as libraries, museums and so forth, and they are attracting the attention of major audiovisual entertainment companies who see a lot of commonality to what they’re doing. But they have -- they haven’t published a spec yet. They’re working on it. But the NYPL is the sort of 800-pound gorilla of librarydom, and very extremely influential. So that ought to be very interesting.

In the music area, we’ve already heard about a couple of important initiatives going on, the Open Music Initiative, which is not a standards body, per se, but certainly standards are becoming defined or associated with the OMI as it goes forward.

And one of those Benji Rogers talked about is the concept of the minimum viable data for identifying musical works, and that has gone along -- it’s on its way to being defined now. It’s kind of in the -- I’d say home stretch of becoming finalized, and it’s really gone on to two tracks, no pun intended. One is the track of what’s the really minimal amount of data that everyone is willing to share amongst each other, and that’s a very
small number of fields, and then there is the much larger
group of data that is necessary to complete a transaction
of royalties or whatnot, a much larger set of fields.
And so that’s also coming along and the dot-blockchain
organization is building technology around that, and
technology around that will also presumably come out of
the open music initiative.

I’ll get back to music again in a moment, but I
want to move on. In book publishing, besides the aspect
of it that affects the library community that I just
mentioned, there isn’t that much going on right now.
There was some activity to define a rights-controlled
vocabulary standard during the time a few years ago when
the book -- the Google book scanning litigation was hot
and heavy and there was a proposed settlement on the
table which involved the creation of an online rights
registry for book content. Then as many of you know, the
judge in that case rejected the settlement and so that
book rights registry sort of vanished in a puff of smoke,
which personally for me is a tragedy. I thought that was
a great idea and could have been built on in certain
interesting ways.

So there is a book industry standards body
called the Book Industry Study Group, which is kind of
revisiting that whole area. But without the specific hot
button need of the Google Books litigation settlement to incentize the development of a standard, we’re kind of -- and I’m on this committee in the BISG, we’re kind of looking for the right business contexts on which to build standards. So that’s where that is.

In photos, there is the PLUS system, which is a registry and has a set of standards for metadata. And that’s been under development for some time and it’s, you know, getting ready to go, I would say. A lot of stakeholders in this room interested in that.

And then there’s RightsML in the news business. Stuart Myles is here, who’s, you know, the horse’s mouth on that. And that’s also in development coming along very well, but not, you know, in production yet, I would say. And please correct me if I’m wrong.

The one that I’ve saved for last is actually the one that I believe is really up and running as a going concern and has been for a few years now, albeit among a small subset of its area, which is consumer magazine publishing. There is the PRISM Rights Language, which is part of the PRISM standard for metadata for magazine content, and it comes out of places like Conde Nast, Time, Inc., Hearst, Meredith, places like that. And there’s sort of a narrow subset of those entities that use this right now. PRISM is one of these reverse
engineered acronyms, it stands for Publishing -- Ed, do you remember what PRISM stands for? Publishing something for Industry Standards Metadata. They came up with a name and then they figured out what it stood for.

So that -- and then the last thing that I’ll mention, once again in book publishing, is OPDS, which is a syndication standard for e-books that has come out of a group of publishers and e-book aggregators, retailers. And the NYPL is also involved in that.

We finally discussed a few of the big successful proprietary rights licensing metadata standards that are inherent in schemes that are up and running now, and the two biggest ones would be RightsLink from the Copyright Clearance Center, which is primarily involved with what’s called STM Journal articles -- scientific, technical, medical journal articles from publishers like Wiley, Elsevier, Wolters Kluwer and so forth, and then Getty in the stock image space. They have their own kind of licensing hub.

And then finally in the music area, there are a couple of entities that are trying. There’s so many different rights to license, there a couple of entities that are trying to roll up and become sort of one-stop shopping services for rights licensing. And SESAC in the United States would be one where they acquired the Harry
Fox Agency and they’re trying to become this one-stop shopping. And then in Canada, SoCan is essentially trying to do the same thing up there, and they’re a little smaller than we are so maybe it’s a little easier. But that’s what’s going on there.

So that’s kind of where we got to, and I’m sure I’ve gone way over three minutes and so I’ll stop. Thank you.

MS. ALLEN: Thank you, Bill. Next up is Paul, and Paul paneled “Interoperability Among Centralized Proprietary Registries versus Open-Sourced Registries,” and also with Ed was talking about turning contracts to code.

MR. JESSOP: So you get twice the volume, half the quality, and a very confused reporter. Dealing first with turning contracts into code, it’s very clear to us we’re not just talking about turning contracts into blockchain smart contracts where there’s a bunch of other scenarios where some sort of machine -- readable machine, interpretable chunk of code, gets used to specify whether it’s an entirely electronically mediated contract or as the way of specifying the terms of a regular contract through the use of expression languages like ODRL.

So we tried to look at both of those and it became clear that we need to distinguish between how we
deal with the world going forward, the bright new horizon
of entirely documented systems which are designed for
this environment from the outset, versus how we deal with
the history of written contracts which have been locked
in musty filing cabinets for years, which were designed
to have wiggle room in them, which are intrinsically not
suited to electronic interpretation. So that’s going to
give us some specific difficulties in dealing with it.

The requirements for either of these to happen
are a common vocabulary of the way -- of how we interpret
words. At the moment, we have sort of statutes give us
definitions of what these words mean, but unless both
parties through a contract have a common understanding of
the intended meaning, the outcome or the deliverable will
not be what was expected, which would be unfortunate.

So we need to have both structure, schema, and
definition ontology of what the -- how the words fit
together to express the desired outcome from the
contract. None of those is quite there yet.

Who should define these things? Well, the
government could do so, and indeed the government does do
so -- well, one of the arms of government does through
legislation. And that may or may not be adequate. The
market will define the rest either through adoption of
particular proprietary systems or through coming together
in standard setting organizations.

We detected a risk that the effective veto power of some large organizations might prevent an effective standard setting, not necessarily to everyone’s benefit. An interesting question was the risk of information leakage. If you need -- if you invent a new business model and you need to have a term specified in a rights expression language to accommodate that, then going through a standard process effectively informs all the competitors of what you’re planning to do long before it actually happens.

So specifically the government -- I know this is a question you’re asking us -- could do one of a number of things. We’re not really sure, but it should certainly encourage this area. It may have a role as a publisher of the results of some public/private partnership in setting vocabularies.

Moving on to the registry issue, and I’m trying particularly hard here not to editorialize since this is my patch, we looked at the term open source registries, and we’re not really sure what that means. We interpret it as crowd-sourced registries or self-registration processes, and that seems to fit as the opposite of centralized proprietary registries.

In order to look at this, we need to understand
what they’re trying to do, what’s the purpose of the
exercise, are they there just to provide identity or are
they there to provide a soup to nuts rights management
trading platform? And when you’ve decided that, you can
work out what they need to do.

Interestingly, reputation management kept
coming out in both the first and the second area. How
much do you trust the assertions that are made? How do
you use the ability to validate or indeed challenge the
data that’s in the registry if you believe it’s wrong?

Interoperability seems to be one of those great
things everyone wants but nobody quite agrees on what
they mean by it. We have a horizontal interoperability
between different registries in the same field, different
implementations that need to work with each other because
they’re providing the same sort of information, but
different subsets of a common class. But, also, vertical
interoperability where different classes of things need
to use the same terms as you go down the supply chain.

Again, what is the government going to do here?
Well, it can help with defining the vocabulary, the
schemas and so on and maybe act as a publisher. But
there was no great enthusiasm for incorporating the
existing corporate office systems into that. I know we
had a very great deal of work being done on them, though
I know that’s starting to happen.

Are these things a natural monopoly that the government should be doing? Maybe not, I think was the conclusion of our group.

MS. ALLEN: Thank you very much, Paul. Lance on blockchain technology.

MR. KOONCE: So I’ve been -- I’ve been talking and writing about blockchain technology for a year or so, and thinking about it for a little bit longer. One of the things that is clear when I’m talking to different people is that there are people who are sort of immersed in this that really are at an incredible technical level, and then there are people who have really -- are just getting to know the technology at all.

And our table was more of the latter today, so we spent most of our time just sort of level setting on what blockchain technology is. The question that I was asked from the start and then over again by different people is sort of, you know, what is blockchain good for? I mean, is it -- do we really need the technology for the things we’re talking about here? The short answer to that from my perspective is yes and no. There are things that it’s good for, things that it’s not.

There’s been an interesting pivot over time from people who only talked about Bitcoin and
cryptocurrencies and pivoted from that to talking about blockchain technology as the underpinning of those cryptocurrencies and how it could be used elsewhere. And then I think we heard some of this earlier today, there’s been a pivot away from sometimes -- from even talking about blockchain technology to talking about distributed technology generally and how that can be used. And blockchain acts as a bit of a wedge in sort of opening the door to having conversations about how any kind of digital data, but in this context content, can be shared especially among parties that don’t necessarily trust each other from the start, you know, where people have different silos and where blockchain can sort of -- or other distributed technologies can facilitate the sharing of that data.

A couple of the key points that we talked about were that there’s a distinction when you’re talking about blockchain technology in particular between the content itself and limited data about that content, which is what really gets moved on blockchains. It’s essentially keys to the underlying data. So that’s a distinction that a lot of times gets lost. Some of the folks that were on some of the panels earlier today I thought, you know, broke that out pretty well. But there is a real difference between blockchains which move keys to unlock
access to digital data and moving the data itself, and
blockchains are terrible for moving content. They just -
- they can’t really be used for that.

So that’s an important distinction that I think
when you’re talking about this type of technology that
people need to understand and that we talked about at
some length. There are distributed technologies that are
good for moving content. I mean, the first one we saw
was Napster. Torrents are great for moving content. And
so even though all of those, just like bitcoin sometimes
has a negative reputation for being used for dark -- dark
market goods, you know, there will be uses of peer-to-
peer technology for moving content as long as it’s secure
that are going to be really interesting coming up in the
next few years.

So we went through that. We talked about the
ways in which blockchain technology and related
technologies do impact content. One of the primary ones
we talked about is registration. That’s sort of the
identification level of the content. We heard from
Blockai earlier today and from Monegraph and Ascribe.
That’s one level of what’s being done.

Blockchain technology and related technologies
are also very good for the tracking side, and that’s I
think what really has gotten people particularly
interested is that you can create these unique
identifiers for a piece of digital content and then track
the use of that sort of token for that content, add to it
and keep it secure and immutable. And then the next
level is the smart contract level that the other table
talked about, and we touched on that and how that fits in
with these technologies and why these technologies have
enabled that -- the sort of -- the new idea of how smart
contracts will work living on a blockchain, although as
you said they certainly don’t have to.

So -- and then we talked a little bit about
micro payments and whether that’s something that’s going
to really come into play. There’s always been talk about
blockchain being a facilitator of micro payments really
coming into being because you reduce the friction in the
payment system that’s currently there and can bring costs
down for transactions. You know, from my perspective -
and we talked about it a little bit -- is that that’s
probably right now still a ways away, but it’s -- it’s
certainly a promise that will be interesting to see if
that comes through.

And then we spent a little more time talking
about essentially the stack for these types of
technologies. Blockchain and some of these other
technologies will ultimately be plumbing. You will not
be going to consumers and saying I’ve got a great new blockchain app. That really should not happen. The user experience will be completely different, but those of us who are involved deeply in content and IP, it’s really helpful to understand how these things work. And with that, I can turn it over.

MS. ALLEN: Okay. So the next panelist is Brian Scarpelli, and he’s with ACT/The App Association, and will address what social user needs need to be addressed and/or supported to advance the online marketplace for copyrighted works.

MR. SCARPELLI: Thank you very much. Yes, we had a -- I think a pretty robust group that really represented all different kinds of viewpoints and types of copyrighted works. So thank you to everyone who contributed there.

Pretty much we started initially with just talking for a bit about who we mean when we’re talking about user needs. So we more or less settled on users -- that is a bit of -- it’s not a very simple term, you know, as you all probably know, but users as consumers, users as creators who use other content, but, you know, an important suggestion that we had that we seemed to find some agreement on was this group would not include those who knowingly illegally, you know, would use a
Then we talked a good deal about -- after who we are, what do we need, what are these needs. And there was a great discussion there, and so just to summarize what some of these are. A number of these kind of are interrelated or looped together, and they’re certainly not in any order of importance.

But merged -- we found some agreement around the need for accessibility to information on legitimate creators and buyers by accessibility that meant a number of things to a lot of people -- accessibility in the sense that it is digitized, it’s open, and even accessible to those with disabilities themselves.

Second one I’ll note is a need for increased awareness and I suppose you could say education on copyright-related roles and responsibilities. And really I suppose that is linked to clarity or certainty on what those roles and responsibilities are.

Another one worth noting, the use of as robust as possible metadata with these copyrighted works regarding artists and creators, and there was a couple of reasons given for that. But that was one that was something worth noting.

And I think the last -- the last one I’d note is -- and, again, these are sort of related to certainty
in application of the law and clarity. But as you float between jurisdictions, even to other countries, the -- you know, the certainty in the application in that context.

I hope I’ve fairly summarized a number of the needs that we talked about there. I suppose the last part would be how or how could these needs be addressed, and more specifically I think to what we were tasked with is a governmental role in answering that question.

We did talk about some ongoing good work that would -- that is seeking to list legitimate sources. The RIAA, the MPAA, were both mentioned by one of the members of this little roundtable that we had, and that those should be encouraged and leveraged, I suppose. But we did -- we did talk about how, you know -- we are talking about copyrighted works and how the Copyright Office could ideally provide that information that -- provide information on copyrighted works that would speak to a number of these needs that we identified.

I realize that, you know, it’s going to be -- it might be a little more difficult for the Copyright Office to address application of copyright law in another country or something like that. Those are legitimate needs we noted anyway, but I think the Copyright Office’s role was probably the main recommendation.
MS. ALLEN: Thank you so much, Brian. And then finally, Stuart Myles, with a topic “What are the Practical Steps to Adopting Standards for Identifying and Controlling Copyrighted Works.”

MR. MYLES: Thanks. So I had table one. So table one, as everybody introduced themselves, most people said I’m just an observer, I’m just here to learn, I just want to be educated. But then we had a very vigorous discussion that went all over the place. So I’m going to try to summarize that in three main areas.

First of all, what are the problems that we’re trying to solve with standards and with rights. Then I’m going to talk a bit about what are the forces that are making those problems hard to solve, and then finish with these are the things that we think are more or less concrete steps that we think the government and other organizations can help to solve those problems.

So in terms of what is it, why do we need standards, why do we need rights, we have representatives from the music industry, photos, cultural works, news, so all over the place. But there was a common theme of there’s millions of dollars that should be being paid to artists and to rights holders that are not necessarily getting there.

Equally, there are people who are artists who
want to be recognized for their work who may, in fact, want their work to be used, not necessarily paid for that work, but used to create other cultural objects. So different industries but very similar needs.

So what are the -- we picked in summary three things that we think are forces that are making those problems hard to solve, and the first big one really that dominated is technology. So on the one hand, it’s too easy to run a search against Google and find an image and download it and say, well, I found it on Google so it must be okay to use. So people don’t necessarily know that they are violating rights.

On the other hand, it’s too difficult, the technical process of applying metadata, keeping that metadata through the work flow as content flows around the internet, is arguably too difficult. And a lot of artists and creators don’t necessarily want to deal with a lot of words and numbers, particularly the visual artists. So we felt that that was a barrier that technical platforms could help with.

So the second big thing that we talked about was the culture, sort of culture of the internet. So in a lot of ways this is being promoted by technical platforms and philosophical movements like the copyleft movement and so on that once more cultural work is
created and not necessarily a big fan of rights.

And then the third thing that we talked about was human nature, that people often think that like, well, if I’m downloading this work or I’m making use of this work, you know, it’s Disney or it’s Katy Perry and so on, so there’s no real harm, you know, they’re making tons of money anyway, it doesn’t really matter if I do it. So all we have to do is solve technical problems, change the culture of the internet, and overcome human nature.

So the ways that we thought that we could make progress on these things, both government and organizations, standards bodies, and others. So we felt that there’s a role to be played in terms of education. So people often don’t realize that they should be observing rights or paying licenses or providing attribution. So we think that there is a role for government and others to educate people more about what they’re doing and what they can do and what they should do.

We felt that there is a role for government to do things like we’re doing today, which is to promote discussion and have a balanced view between all of the different people who are part of or interested in rights and in cultural works and in commercial works.

For The Record, Inc.
(301) 870-8025 - www.ftrinc.net - (800) 921-5555
And that’s a similar thing to what a lot of standards bodies can do as well, is to bring together different players and try to balance out things so that it’s not dominated by one group or another.

There was an interesting suggestion that government might play not to dictate picking a standard, but perhaps -- to all of industry, but perhaps instead to say if you want to work with us in this particular -- similar to the way the ADA, one of the effects of the ADA is, that to say, like, well, if you want to work with the government in this way, you need to implement this technology or work with one of these standards. And so once companies have to do that in order to buy or sell from the government, then maybe that encourages people to go with one particular standard.

We also felt that working with standards bodies like W3C or IPTC could help because, as was mentioned earlier, there’s quite a few standards that are being produced or worked on, and so maybe working with those standards bodies that work internationally might be a way to help accelerate some of that work and help accelerate some of the adoption.

And at this point I’ll put in a plug for a meeting that we’re holding in London in May jointly with BBC, IPTC, W3C, to help try and accelerate some of this
work. So if you’re interesting in having further
discussions, let me know.

And then the final suggestion was that there
are concrete things that we can do to accelerate this
work, but we thought that it’s one of the most important
things that the government and similar organizations can
do is to keep the conversation going. So we suggest
returning perhaps in a year to see where we are and to
try to accelerate the work that’s been going on. Thanks.

MS. ALLEN: Thank you all so much. It sounds
like there were very, very robust conversations and a lot
-- and that’s really what we were looking for, and we are
glad that you were able to facilitate.

Now, we’ve just heard summaries of what was
said in the breakout sessions. Does anyone have any
questions or anything that they wanted to add, points or
perspectives in what we’ve heard, whether you’re online
or in the room? Question?

And I hate to interrupt you, but would you mind
using the microphone so that those listening on the
internet can hear?

AUDIENCE: Thank you. I noticed that there are
lots of people here who are engaged in representing
various groups of creators, but very few actual creators
here in this room or members of creators associations.
So if we meet again, can we try to get more such people to participate? Because their voices are valuable and traditionally -- because I’m in the writing end of things, I’m with the AAJA, American Association of Journalists and Authors, and we traditionally in our industry have depended on publishers to speak for us. But now so many of us are self-publishing, we’re having to do so much on our own.

That’s happening in every industry. The creators need to know more and to be able to do more. So can we -- can we make an effort to try to bring creators and creators associations into the conversation? Thanks.

MS. ALLEN: Thank you. Are there any other questions or points to raise? Are there any from the chat room? Nope.

Okay. Then on to the next question is, we’ve heard a lot about blockchain and smart contracts as avenues to advance the online marketplace. Would anyone care to add any observations on that topic?

MR. JENNER: I speak as a foreigner, and thank you for having me here. I just am struck by the fact that in Europe and in the U.K., any of these discussions would have been -- had a lot of references to transparency. I’ve heard no reference to transparency, or very little. It’s been not high on the agenda.
And, further, to the artist, the writer, I think that is probably one of the things they might like to have mentioned. I was a manager of artists for many years.

MS. ALLEN: Thank you very much.

MR. ROSENBLATT: Did you want me to -- I've been asked to respond to this. So, yeah, there is a lot -- first of all, it's great to see Peter Jenner here, a big fan. A big fan of the bands you've managed. Thank you for being here.

I've written a lot of stuff about blockchain and this is why I think I've been asked to respond to this. So there's a lot of hype around blockchain, and one of the good things about hype is that it means money comes in. So there's a lot of money coming in to blockchain-based startups. There's several in this room today that are venture backed and so on. And the availability of money and enthusiasm and skilled people is very beneficial to the development of marketplaces, and it's something -- or at least some subset of those items have been missing from standards initiatives in this area.

And so I think a lot of good can come out of a lot of activity. That doesn't mean that all of the activity is going to be productive or going to lead to
positive outcomes. That’s fine. It’s all natural.

I happen to feel that in the content and copyright arena, the most appropriate applications for blockchain are in the B-to-B area for automating transactions, for imposing de facto, de jour standards on them for making things efficient and for introducing transparency, to Peter’s point, which has been raised in discussions that I’ve been involved with and not discussions in America, actually.

So I hear talk sometimes about blockchain applications for content that go all the way out to consumers, and I’m pretty skeptical about that for the reason that I have yet to hear someone suggest some capability that blockchain technology offers that consumers would actually want.

There have been some capabilities that have been suggested, but I don’t actually think the consumers really care very much about them. Now, here’s one example. I’m going to give you an example, then I’m going to caveat that example.

One thing that people sometimes talk about is, oh, consumers are very concerned that the content they are getting is authentic and has a provenance to it. No, they’re not. Consumers don’t care. I can give you many counter-examples of that, which I won’t take the time to
do now.

The caveat to that is, yes, in the visual art or art works, if such a thing were to develop to a significant size digitally, that is very important. People do buy objects. They don’t access them the way they do on Spotify or Netflix or Hulu. They want to be sure that it’s not a forgery and so forth, and they want to be able to resell and to make sure that the resale process includes a chain of title and of provenance.

Otherwise, no, people don’t care about that. I remember back in the first internet bubble the original batch of DRM vendors, some of them touted their solutions as being beneficial to the consumer because you could trust that the content that you were getting from your maybe scientific publisher or whatever was authentic. No, nobody cared about that. So the DRM vendors stopped talking about it.

So there’s this whole class of direct-to-consumer applications that I don’t think blockchain does much for, at least I haven’t heard anything about attributes or benefits in that space. I do feel that blockchain can have a lot of benefit for the straight B-to-B transaction processing applications.

MR. KOONCE: Can I just add something quickly?

MS. ALLEN: Absolutely. That was my next
MR. KOONCE: So I’m going to be a little skeptical about Bill’s skepticism. The -- so I think I can -- I can say that to a certain degree I agree with you in the sense that blockchain technology, some of these other technologies, are ultimately going to be in the background or in the plumbing and not going to be a consumer-facing technology, that there will be applications built on top that will be the consumer-facing technologies.

But, for instance, just to give you an example of something that I have heard from folks like Ascribe and Blockai and Monegraph, is that we all know -- those of us who follow copyright that under the Berne Convention when you create something it’s copyrighted from the start. You don’t need to do anything to record it or register it. You can certainly take it to the Copyright Office and register it, and that gives you extra protections. But it’s registered -- it qualifies for copyright protection from the word go. When I take a picture with my phone, it’s copyrighted and I actually have a record of it because my device tells -- has a time and date stamp and says when that was taken.

What some of these companies that are doing on the registration side, what they’re doing is they’re
offering an ability to sort of create a public record of whatever content you want to take to that level and the attributes that you want to associate with it.

And at least from what I’ve heard, there is -- I would not -- as a copyright lawyer, I would not have expected there to be that much uptake since it’s not helping you in any real way establish your copyright interest. But from what I’ve heard, there’s a lot of power in giving the consumers the ability to control their content in that way and to say that I’ve created something that I’m going to take to that level and I’m going to register it.

So I’m not sure that’s an answer to the sort of overall question of are there consumer applications that are sort of killer applications for blockchain. I’m not sure that there are.

MR. ROSENBLATT: It’s really about -- you know, I agree, it’s going to be in the background. It’s more about like what does this enable consumer applications to do that they couldn’t do before?

MR. KOONCE: Right.

MR. JESSOP: Can I have a go at this as well? Can I agree with your skepticism about his skepticism? I mentioned early today about single digital master in the recorded music area. High resolution delivery to
consumers is now becoming a thing. People are making money out of it. Businesses are being formed on it. And where those businesses accidentally find that they’re delivering something which is inauthentic, which is a low resolution recording which has been upsampled, the consumers are furious. And having an authenticity claim -- whether that’s delivered through blockchain or through some other mechanism, I’m completely agnostic about -- but there is in that case at least a true consumer demand for authenticity.

MR. ROSENBLATT: I’m not sure I’d buy that, but okay.

MR. GRIFFIN: I’m just going to add that transparency is a motive, blockchain is a mechanism.

MS. ALLEN: So we have one question -- two questions from the audience.

AUDIENCE: Yeah. So one of the things I want to just emphasize, a lot of discussions today have been around standards and interoperability, and in building some of these systems I find that a lot of times it’s very difficult to get people to collaborate, to actually do things.

So one of the things that I think I’d like to see more being put into is incentive, whether that be private market incentive or anything that government can
do to spur action and incentive, because it seems like year after year after year we keep coming to these conferences and talking about what is the standard, who defines the standard. And there’s a constant push and pull, but progress is very, very slow, if at all in some areas.

So start to think more about incentives, and even if it just means research and understanding the size of the opportunities and what would change and what the effects of certain changes would be, having some of that research to back up some of these assumptions would be really helpful.

MS. ALLEN: Thank you. If you could identify yourself, name and any affiliation.

MR. MITCHELL: I wish I could. But my name is John Mitchell. I’m still struggling to find my identity. I’m an attorney in private practice in D.C. representing primarily the retail side of copyright and a number of trade associations, which raises the whole issue of as registries, as rules, as smart contracts are being developed in an environment of competitors agreeing on the various rules of the road, it reminds me of an article I wrote a dozen years ago called “Automated Agreements and Restraint of Trade.”

There are certain things that on a face-to-face
transaction we can immediately identify as an antitrust violation. When certain things are baked into the rules and there’s a certain lack of transparency maybe as to exactly what the algorithms are doing, we may wake up one day and find that there are a number of felonies that were committed because of the Sherman Act saying you can’t do that, whether it’s in terms of the agreement itself that might affect price, normalizing it or leveling it or putting caps, or since we are dealing with copyrighted works, which have a legal monopoly, rules that, in fact, have the effect of expanding the control of the copyright owner beyond the express limits that are set out in the Copyright Act.

Every copyright in 106 is subject to Sections 107 through 122, and it is very easy -- actually already very easy to have terms in there that effectively say despite what Congress said, we get all these rights or you don’t get the benefits of these limitations.

The suggestion going forward might be to invite someone from the Antitrust Division with the Department of Justice to one of these conferences just to get that kind of reality check. Thank you.

MS. ALLEN: Wonderful. Thank you very much. I would now like to turn this over to John Morris for closing remarks and a few thoughts. John is the
Associate Administrator and Director of Internet Policy for NTIA.
CLOSING REMARKS

MR. MORRIS: Great. Thanks, Susan. We had slotted me to come here in part to kind of make sure we could force a conversation about a government role, but frankly the last 45 minutes, last half-hour, has been an excellent conversation. So, you know, you guys have already done a great deal of my job for me.

Do I need to do something --

MR. ROSENBLATT: I’d just like to add something from our panel quickly, because you asked us to come up with, you know, what’s the government’s role and I failed to do that. And so I’d like to try and remedy that failure.

MR. MORRIS: Two minutes.

MR. ROSENBLATT: Thirty seconds.

MR. MORRIS: Thirty seconds.

MR. ROSENBLATT: We identified a lot of standards that are specific to segments of the copyright field, and we discussed the fact that there isn’t one for all fields, nor should there be. And so a potentially good role for government would be to promote and cross-pollinate best practices across segments. That’s all I wanted to say.

MR. MORRIS: Okay, that’s great. No, that’s very helpful. I mean, a lot of ideas have come out both
just in this discussion but also, I assume, even more ideas from the small groups. And so one reason to have note takers is to -- is so that we can gather and capture some of those ideas.

So, I mean, you know, thank you enormously. I mean, I haven’t gotten to my kind of final remarks. We’re still in kind of the plenary, so you guys can feel free to interrupt me and challenge what I’m going to say.

But, you know, let me step back and talk about the government role a little bit more broadly. You know, a major message that we took away from our April 2015 gathering on this topic was that, you know, the government shouldn’t come in and solve the core problems. I mean, we’ve heard, I think, a lot of suggestions of good things that we can do at the margins to promote interoperability and dialogue, and we certainly will take those to heart.

And let me just say -- and then, of course, earlier today, I mean, it was very much echoed that we shouldn’t come in to solve kind of some of the core problems.

And let me say from the Department of Commerce’s perspective, NTIA and PTO, we’re happy to have that answer. We’re perfectly happy, you know. We would strongly prefer that industry and the stakeholder
community at large -- not only industry, but the full private sector stakeholder community, take the lead in solving these problems.

And so our main question is what can we do to help, and I think you guys have given us a lot of answers that I think we will be able to look at and try to take on.

But I also do want to kind of say something a little bit more, you know, cautionary to say that the government -- you know, our government, the governments around the world, care about these problems. These are problems that they matter to our equities and our interests. We’re very concerned about, you know, promoting a strong economy and having a strong, effective, efficient digital marketplace is one way to get a strong economy.

And so I say that to say that, you know, in the end the government won’t wait forever for these problems to get solved. And so, I mean, I really want to kind of urge, you know, us together, you guys mainly, but to the extent that we can help contribute, to really start trying to address some of these specific problems that, I mean, you know, we’ve just heard, you know, from the questioning and from the panels here. You know, some nagging problems.
And, again, we stand ready to help. We stand, you know, ready to assist. But we really do need to figure out solutions for these problems. And so I’m not saying that next year we’re going to do anything, or a year and a half, but, you know, I mean, in five or ten years if these problems are -- you know, if we don’t really have solutions to some of these problems, my guess is that some future government policy makers will say, okay, the government has to step in. And that’s not necessarily the best approach from our perspective. So I’m just kind of trying to encourage us to really work together.

We did hear, and I’m going to thank a number of you, that from our perspective these meetings have been very, very constructive. At least I hope that the majority of you agree with that perspective.

And so I think that we do plan to continue this dialogue and at minimum sometime late next year probably try to come back. I mean, I’m not making any commitments, it’s a long time away, there’s changes of policy makers and all of that stuff. But in the end, in the work that we are doing, I actually don’t think it’s going to in any way significantly change with the change of administrations. You know, the issues that we’re trying to grapple with are not really partisan issues,
and so, I mean, I really do expect that a year from now we will -- that we will definitely want to come back. But in the meantime, I think there are a number of other specific issues that we’re going to look at in a more immediate time frame. So, I mean, that’s really just a -- just a very broad big picture response from the government perspective. You know, I’m happy to open the floor for another couple of minutes, but we’ve got to get out of here pretty quickly and I need to say a couple thank yous before I do.

But if anyone kind of generally has any -- one or two other specific things that you haven’t heard today that the government should do, I’d be happy to hear about it now -- ask for it now, if -- go for it.

BEN SHEFFNER: Ben Sheffner with the Motion Picture Association of America. One conversation that I’ve had sort of in the breaks with a number of people from various points on the copyright spectrum, it kind of refers to the elephant that’s not in the room today, which is the United States Copyright Office, which is a government body which maintains a registry of copyrighted works, at least in theory. And everyone in this room knows that it’s imperfect and it needs improving and it needs better computers and better databases and all of that. And there’s movement on that front.
But, again, a lot of the conversation today and the panels this morning which were very interesting, you know, explaining a lot of the various private sector initiatives, you know, EIDR, something that our industry uses extensively and we think it’s good and it’s being adopted more and more every day.

But, again, as the -- as the PTO and the NTIA think about this issue more, I think it’s necessary to pay a lot more attention to the interaction between these private sector initiatives and the existing government database of copyrighted works.

For example, I’d be interested in hearing a lot more about how these various initiatives interact with the databases. I mean, the Copyright Office is talking -- has talked at least in theory about creating APIs and things so that information that’s in those existing databases can talk to the various private sector databases.

Anyway, again, as you think about this more, if there’s going to be another event, I think it’d be very helpful to talk more about sort of the interplay between the government -- the existing government databases and the private sector initiatives.

MR. MORRIS: Yeah. No, thanks, Ben. I think that’s a very good point. I mean, I think there is very
broad consensus that the copyright office in terms of technology funding and things like that, there’s a lot that, you know, needs to improve. And I think that will be something that comes out pretty quickly.

And obviously there’s been some changes of leadership recently, and just earlier today Shira and I, you know, said, you know, we need to go and start kind of, you know, with the new folks and really make sure that we and they are working in tandem and really communicating. So, I mean, I think it’s a very good observation.

MALE AUDIENCE: (Inaudible).

MR. MORRIS: Yeah. I didn’t want to -- yes, exactly. That’s a good point, even better off mic, perhaps. But I’m -- so, go ahead.

MR. MCCONAGHY: Hi, there. Trent McConaghy, Interplanetary Database and BigChain DB. I apologize if this was brought up before. I had to step out briefly. But takedowns. So basically obviously if there’s some content out there that someone else is hosting and it’s mine, I can send a takedown notice and then that person will hopefully follow and take it down.

This directly conflicts with one of the key characteristics of blockchain technology immutability. If I issue a takedown and this media is stored on an
immutable blockchain database or immutable file system, it’s not coming down. So I think it’s really useful to have a conversation to try to reconcile the laws with the technology.

MR. MORRIS: So I think it’s a helpful point, and I certainly have always assumed that a blockchain-based technology would need to have a takedown process. But it is a good point, so thank you.

So we are running out of time, and there is another event in this room later. So I have been under strict instructions that I have to get you out of this room very shortly. But I do want to kind of wrap it up and say some thank yous.

Shira, who obviously opened today, had another commitment and couldn’t be here until the very, very end, but Shira and I really want to extend some thank yous.

You know, first and really foremost to — well, Susan Allen has spent a great deal of time up here. But her colleagues in Shira’s office and elsewhere in the PTO, Steven Ruwe, Megan Askew, Nadine Herbert, Linda Taylor, John Ward, Miriam DeChant, Bill Brantley, there are a whole bunch of people at PTO, David -- a bunch of people who really made a huge contribution.

And my staff, my NTIA colleagues, Louis Zambrano and Susan Chalmers, and then also the folks who
run this tremendous facility, Melodi Ashrafi and her
team. And I’m sure I’m leaving some folks out, but could
all of us just give a huge around of applause to Susan
and everyone else.

(Applause.)

MR. MORRIS: And let me just close by saying
thank you to you guys and to -- I mean, to all of the
speakers and moderators and facilitators. You know, I’ve
done a bunch of these things in the copyright space and
in a lot of other spaces, and you never know the night
before, you know, how’s it all going to turn out. And I
really think -- I mean, this was a great set of
conversations. I learned a huge amount. Obviously some
of you already know a lot of it.

But more importantly, I think, you know, I saw
so many times today when there were connections being
made where, you know, two people were sitting next to
each other, they had never talked and came from different
perspectives, and that’s really I think some of the great
value of this kind of meeting. So, I mean, I really
appreciate all of you for being here, and certainly all
the speakers for participating.

So thanks very much. You can shmooze here for
about four or five minutes, but then they will start
taking chairs away. You can move out there and keep
chatting. So thank you.

(Applause.)

(Whereupon, the meeting was adjourned at 3:49 p.m.)
CERTIFICATE OF COURT REPORTER

I, Jennifer Razzino, do hereby certify that the foregoing transcription was reduced to typewriting via audiotapes recorded by me; that I am neither counsel for, nor related to, nor employed by any of the parties to the case in which these proceedings were transcribed; that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of the action.

______________________________
JENNIFER RAZZINO, CER
Court Reporter