Bringing Order to Digital Identifiers

The case for streamlining with EIDR

By Richard Kroon, Director of Engineering, Entertainment IDentifier Registry (EIDR)

Abstract: M&E workflows are increasingly complex and revenue is derived from increasing numbers of lower-value transactions. Anything that can reduce costs, increase supply chain velocity, or put organizations in a position to respond quickly to new threats and opportunities is worthy of consideration. Common use of EIDR as a globally unique, persistent identifier will accrue multiple benefits throughout the media & entertainment ecosystem at multiple points within every product supply chain.

During the Studio Era, there was no need for the sort of durable, globally unique audiovisual works identification provided by EIDR. At that time, vertically integrated monopolies exercised complete control over production, distribution, and exhibition and there were no ancillary markets. Then came television, the break-up of the Hollywood studios, the rise of independents, home video, and the Internet. Now it is impossible to imagine an audiovisual work that does not pass through multiple hands and that is not viewed in multiple media and innumerable places over a long span of time. Whenever two or more parties must communicate about a common work or cooperate on a single project, they must first find common ground.

Traditionally, companies communicated by exchanging descriptive metadata along with any contract, asset, or transaction and then relied on manual labor to match everything together. Sadly, communicating parties do not always agree on what these descriptive data are or how they are structured – even titles may differ, especially when abbreviated to fit within arbitrary space limitations. Thus, record matching has been a long-standing challenge and remains an ongoing expense. The process can be improved significantly if the two parties agree on a single identifier for each project or asset. However, this is a point-to-point solution and the number of identifiers expands geometrically with the number of parties involved. Worse yet, since title management and other workflow support systems are not particularly flexible, there is often no place to record these point-to-point identifiers in each party’s workflow support systems, so they reside off to the side, requiring manual effort to re-link them at every touch point.

Providers of niche solutions – aggregated metadata, digital distribution, television guides, performance results, etc. – often provide their own identifiers, requiring their customers to track these external identifiers in addition to their internal identifiers and all the point-to-point identifiers they developed with their close partners. In most companies, there is no one place where all of these identifiers are stored, leading to a complex structure of inter- and dis-connected silos of common understanding. So now, instead of just manually matching different bits of metadata in the hopes of keeping product flowing through the supply chain, people are also called upon to match and manage different identifiers that facilitate brief spurts of automation within a product’s years-long lifecycle. This works, after a fashion, so long as margins remain high and transactional volumes remain steady.
However, market fragmentation, the disintegration of discrete release windows, and the myriad options encompassed within digital delivery mean that the status quo cannot be maintained.

**The promise of alternate IDs**
The universal adoption of EIDR will help solve these communication and matching problems. Companies will continue to use internal identifiers for their own purposes, but EIDR will be the lingua franca that facilitates all multi-party transactions. Until that glorious day, real-world transactions will remain dependent on some indeterminate number of identifiers, generated by different parties for various purposes.

For example, in an eight-party ecosystem, there could be up to 28 different point-to-point identifiers per asset. One hopes that the party generating the point-to-point identifier would already have that ID stored in their internal systems, but everyone else will certainly have to match the external IDs to their internal systems. That means there would be 21 different ID matching efforts across the eight parties for each asset. If each party used EIDR as their external identifier, there would only be eight ID matches necessary—a system-wide savings of at least 13 matching efforts per asset. (Recall that the same asset ID may need to be matched multiple times if it is not tracked in all of the necessary internal systems.)

The labor savings of moving from metadata-based matching to ID-based matching is significantly greater than even this, since metadata-based matching does not lend itself well to automation and must be repeated every time there is an interaction between the parties, which could be a dozen or more times per asset per distribution partner in a digital distribution workflow. (See the Winter 2013-14 M&E Journal for a case study showing the labor savings of moving from manual matching at each touch point in a two-party digital distribution workflow to an EIDR ID-enabled process.)

The next best thing to using an EIDR ID for all multi-party communications is using the EIDR alternate identifier repository (containing studio internal IDs, IMDb IDs, BFI IDs, ISANs, Rotten Tomatoes IDs, Netflix IDs, etc.) to facilitate the translation from an ID one party possesses to a different ID that another party requires. In a simple example, where Party A has an EIDR ID but would like to communicate with Party B who does not (say, a distributor wishing to purchase enhanced descriptive information from a metadata aggregator), Party A may be able to use EIDR to find Party B’s proprietary identifier and avoid the need for manual matching or the tracking of yet another point-to-point ID. In a more complex example, neither party has yet mapped their internal systems to EIDR, but may find that they each possess IDs associated with the same EIDR record, allowing EIDR to act as the translator between them.

**It’s the data, stupid**
To paraphrase James Carville c. 1992, as far as the business side of the media & entertainment industry is concerned, “It’s the (meta)data, stupid.” Every business transaction requires an item offered for sale to consumers, television guide data, performance data, etc. In some cases, the data document and facilitate the transaction, as with B-to-B sales. In other cases, the data are the focus of the transaction, as when one buys enhanced descriptive metadata or audience ratings information. However they arrive and for whatever reason they were generated, the receiving party cannot make use of the provided data until they are tied to the receiver’s internal records. The fastest, cheapest, and most reliable method for doing this is via a globally unique, shared ID, such as EIDR. The next best solution is by translating the IDs each party already possesses via a common point of reference—namely, the EIDR alternate identifier repository.

Proper identification via a shared identifier or alternate ID translation can deliver significant cost savings and can help make an organization sufficiently nimble to take advantage of new revenue opportunities as they present themselves. These alternate IDs come from a variety of sources. Vendors often store a studio’s internal ID when prepping a deliverable, making that a possible pivot point for future transactions. Data aggregators and digital retailers, such as IMDb, Baseline, and Amazon, often publish their IDs along with their data, making the IDs a valuable tool for multi-party identification exchange. Local acquisitions may arrive with a potpourri of
identifiers, making it difficult to link them with other corporate records.

It is also possible to use the EIDR registration hierarchy to move from one identified asset to a related asset elsewhere in the tree — such as from a transcoded to the abstract work or from one edit to another. In these cases, the assets do not technically share a common ID in any reference system, but are still associated with one another via unambiguous links in the EIDR registry.

For example, before greenlighting a theatrical motion picture project, one studio will review competitive data showing the past performance of similar works. The collected data cover theatrical performance, cable TV, broadcast TV, VOD (pay-per-view, subscription based, Internet-delivered), electronic sell through, physical media sales, etc. across multiple markets worldwide. No one data provider covers all of these channels in all of these territories, so the studio must collect and aggregate data from more than 25 different sources — per title — to develop a complete picture of the competitive landscape. Only then can an informed business decision be made.

In another example, there is a studio that does not have room to store an extensive list of third party IDs in its master title system. Instead, it has a hyperlink to each title’s record in the EIDR Web UI. By clicking on that link, the studio’s users suddenly have access to hyperlinks to a variety of Internet-searchable data sources including BFI, IMDb, ISAN, Rotten Tomatoes, and IVA, and retailers such as Amazon and Netflix. They can also access pre-matched internal IDs to obtain data from commercial aggregators including Baseline, Red Bee, Veronica Publishing, and West 10. The studio’s staff can use these resources to verify how their works are being presented to the public and to augment their descriptive offers in B-to-B or B-to-C avail.

Another studio regularly engages in joint ventures for foreign distribution of their produced content. They provide descriptive and business metadata to their JV partner, who must then incorporate the affected works into their internal master title system — or match them to existing records if they are already there from a prior deal. When the JV partner returns performance data to the originating studio, they must be re-mapped into the recipients’ data systems. These data exchanges cannot be automated as they stand. If both of the JV partners had EIDR IDs for all of their titles, this process could run lights-out. Failing that, they could use EIDR to transform separately known IDs into an exchangeable ID. It is not as convenient as using an EIDR ID directly, but it is still an improvement over repeated manual title matching.

Having the ability to translate one ID into another as an intermediate stage helps organizations reap immediate benefits while they work towards full EIDR integration. Other areas of potential cost savings or revenue enhancement include:

- Elimination of organizational redundancies
- Procurement consolidation
- Easier satisfaction of compliance requirements
- Increased supply chain velocity
- The ability to quickly explore new revenue opportunities
- Improvements in the consumer second screen experience
- Collecting money you are already owed
- Paying what you owe with less effort and greater accuracy

World harmony through shared identification

Every business transaction is driven by data, and every set of data is linked by some common point of reference. If we still lived in the 1940s at the pinnacle of the Studio System, the status quo would serve just fine. But we do not, and it does not. Workflows are increasingly complex and revenue is derived from increasing numbers of lower-value transactions. Anything that can reduce costs, increase supply chain velocity, or put organizations in a position to respond quickly to new threats and opportunities is worthy of consideration. Something that can do all three, is not a commercial advantage, it is a survival necessity. Common use of EIDR as a globally unique, persistent identifier will accrue multiple benefits throughout the media & entertainment ecosystem at multiple points within every product supply chain. Until that day, the EIDR alternate ID repository can be used to break down the Towers of Babel that have grown up around point-to-point and proprietary identifiers, allowing organizations to realize these future benefits today.