The Future of Music is Dependent on Open Standards

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The passage of the Music Modernization Act is a major milestone and opportunity for the music industry to usher in a new era of growth and innovation. With the establishment for the first time of a comprehensive, accessible database that connects copyright owners of both sound recordings and compositions, the industry can move to a new phase: one of creating a shared digital architecture with respect to identifying rights ownership and which will ensure interoperability of databases, systems and applications.

This is a critical and all-important step towards identifying and compensating music creators, songwriters and rightsholders in the digital era. The successful establishment and governance of such database is essential to the long-term viability of the industry. Failure to do so will greatly risk the opportunity for material industry growth in the years ahead; and even more importantly, imperil the likelihood of music as a meaningful career for all but for the very smallest percentage of songwriters and performers.

Given its importance to a healthy music ecosystem, our view is that ownership data ought to be both open and secure, and operated like a *public utility.* It is absolutely vital to the industry's lifeblood and vibrancy and therefore it must not be controlled by any singular entity, but instead through one of shared governance, neutral academic oversight and open standards.

Why open? With authoritative data from music publishers and labels, an open MLC will ensure interoperability of different systems, applications and databases that are in use throughout the industry.

This construct already exists: *The Open Music Initiative,* which our institutions Berklee College of Music and Massachusetts Institute of Technology co-lead in collaboration with over 200 entities

across the music, technologies and media industries. This includes the three major labels, Universal Music, Sony Music and Warner Music; leading music services such as Spotify, YouTube, Pandora, Soundcloud, SiriusXM and Napster; media companies Netflix and Viacom; tech companies including IBM and Intel; accounting firms like PwC; leading publishers including BMG, Round Hill Music. Atlas Music and Downtown Music; performing rights societies like France's SACEM, Germany's GEMA, Canada's SOCAN and America's SESAC; and hundreds of artists, entrepreneurs and startups.

The initiative espouses an open-source governance model, overseen by two leading academic institutions and its membership is open to all.

Our view is that Open Music is the best solution to lead and define the development of open and shared protocols necessary for the successful implementation, deployment, and ongoing maintenance of this ownership data as public utility model. Open Music's structure is based on other similar consortia that have contributed to the development of innovation and robust ecosystems in industries from aviation, global positioning systems and the Internet itself.

It is a proven and mature model that has allowed these industries and technologies to grow in a robust manner while providing the most benefit to the most stakeholders

The new Mechanical Licensing Collective should be based on open protocols

The final bill that passed Congress establishes a "publicly accessible database" with rightsholder information related to song ownership (each song has two associated copyrights; one for the sound recording and one for the underlying composition). This is an all-critical repository of rightsholder data. Failure to be included or identified in the database will result in lack of financial distribution to writers and publishers, and a continuation of sub-optimal revenue and undistributed money to writers and performers.

Critically, the final bill that was signed into law does not mandate that such a database is a monopoly, as was envisioned in the original bill. In our view, this means that absent a protocol for interoperability of systems and databases, the industry and writers and performers will continue to experience the fragmentation issues that have plagued proper income matching since inception; a problem which has been exacerbated in the digital era as modern-day songs and

related rights are owned by a growing number of entities and owners making proper identification and matching even more challenging.

The only way to address this issue, as well as to ensure the best matching possible, is to create the database on an open, interoperable protocol governed by a neutral entity and overseen by the broadest possible number of industry participants as well as music creators and entrepreneurs.

By establishing an open protocol, the industry will enable interoperability of databases and systems, and it will also lay the foundation for the development of a robust ecosystem that will enable innovation to thrive as we describe below.

It will enable new platforms, services and applications based on emerging technologies like artificial intelligence (A.I) and blockchain to be developed on top of this protocol, in a similar fashion to the Internet, that will ensure that *every rights owner is matched* and that new market entrants are able to innovate and grow the music industry to many times its current size -- with unprecedented access to data analytics and transaction trust and accuracy.

Rather than anointing a monopoly or oligopoly, this approach will unleash a dynamic and competitive market for layers of technology built on top of open standards similar to the Internet itself.

The Internet: a model for why open standards matter

The advent of the Internet improved not only communications between people across the globe but also introduced new forms of commerce on a scale unprecedented in the history of humankind.

A key component of the Internet was the development of protocols based on *open standards*, which allowed any person or community to implement the standard in an *interoperable* manner. The independence of individuals and communities to develop solutions based on open standards allows new innovations to emerge which build on these standards with the confidence of knowing that the fundamental protocols will interoperate with each other.

When the pioneers of the Internet sent the first few bytes of messages over the rudimentary IP protocol, they could not have imagined that within a few decades the Internet would grow to include tools and services that provided rich interaction between people and communities around the world in an instant fashion. Today tools and services such as browsers, shared files, chat rooms, social platforms, music streaming, videos, and others have become a part of the daily life of users.

This variety and richness in service types and content was technologically possible due to the *layers* of technology, in which each layer conforms to well-developed open standards. These layers have also become the *infrastructure* for the emergence of new services, which are the expressions of new creative visions of individuals and communities all coordinated under a guiding set of protocols that we now refer to as the Internet.

This is the potential we have at this juncture of the music industry. A chance to reimagine a future music industry based on an innovation-driven ecosystem and architected on open standards, shared rightsholder identification infrastructure and interoperability.

It is the only way forward that will not only ensure innovation, investment and growth, but, as we outline below, supercharge the industry with new technologies like cloud computing, artificial intelligence and blockchain.

Act now to set the stage for new markets for rights and music through new technologies

By basing its rights owners identification infrastructure on an interoperable, open protocol, the music business has the unprecedented opportunity to take advantage of this transformation and to keep pace with other industries in data and transaction accuracy, predictive analytics potential and by extent, innovation and growth.

Layered on top of an open, shared protocol, new technologies like blockchain and AI have the potential to allow all participants in the digital music supply chain -- songwriters, performers, producers, labels, publishers, music services, rights societies, licensors and critically, consumers -- to safely and securely transact and collaborate with each other, offering unprecedented access to information and data and giving rise to rich new consumer experiences that are currently out of reach due to an antiquated, centuries-old infrastructure.

The time to act is now. Fan engagement is at an all-time high, there's more music available in more places than ever before and revenues are growing again for the first time in nearly two decades. The industry must come together at this unique opportunity in time and set the foundational layer for a new future, one based on shared interests and therefore shared, open standards related to music rights ownership. This wave of new legislation and new technology provides the music industry with the once-in-a-lifetime opportunity to create a new, truly global market for music and rights, linking people across various creative communities and markets.

At a macro level, the combination of open standards and new technologies can provide a level of collaboration, trustworthiness, innovation and revenue growth in the music world that never existed before -- one which will benefit not just music but society writ large.