Semantic Technologies for User Generated Content Copyright Management

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April 4th, 2014, London
Use Case

- Pilot project at Sony DADC
- Together with DAM consultancy and DDEX\(^1\) experts

\(^1\) Digital Data Exchange, metadata standard for the digital supply chain
User Generated Content (UGC)

- User Generated Content, user content remixing copyrighted media fragments
Business Models

• Web media business models go **beyond digital** version of “**copy/distribute**” vinyls, cassettes, CDs, DVDs,…

• Growing: **streaming** (Spotify, Pandora, Netflix, Hulu…)

• Promising: big scale **remixing** (make money if others reuse your content), **User Generated Content** (UGC)
  - **IMPORTANT**: open your content to foster reuse! (No DRM)
Tracking Copyright in UGC

[Diagram showing matching processes between AudioID and VideoID with copyright symbols.]
Monetizing UGC

“Gangnam Style”, +33,000 videos using it, more than $870,000 ad revenue - New York Times, Dec 7th 2012

Choices:
- Block
- Track
- Monetize

match

©
Content IDs not enough…

- What if more than one ownership claim?

- If disputed, no one can monetize
What to take into account...

- Are we **sure** we can claim?
  - Do we own that particular **copy**?
  - In that **territory**?
  - Also streaming on **YouTube**?
  - Does the **artist** contract authorise YouTube?
  - …

  … Copyright Management
Web-Scale Copyright Management

• Requirements:
  – Scalable (largely **automatized**)
  – Takes **into account**:  
    • **Contracts**
      “...all rights on the live version but studio version just in the US.”
    • **Policies**
      “...artist does not want his music together with violent images”.
    • **Rights Expression Languages**
      E.g. DDEX metadata:
      
      `<UseType>OnDemandStream</UseType>`
      `<TerritoryCode>Worldwide</TerritoryCode>`
Monetize “Bullet in a Bible” in YouTube.com?

Green Day’s Contract: “Avoid making available our work together with war images”

Digital Operations says YES but we should check Green Day’s contract...

“Bullet In A Bible” – Green Day

Digital Operations (DDEX)

<isrc>USREV0500293</isrc>
<DealTerms>
  <ValidityPeriod>
    <StartDate>2005-11-15</StartDate>
  </ValidityPeriod>
  <Usage>
    <UseType>OnDemandStream</UseType>
    <DistributionChannelType>Internet</DistributionChannelType>
  </Usage>
  <TerritoryCode>US</TerritoryCode>...

Green Day’s Contract: “Avoid making available our work together with war content.”

“Bullet In A Bible” – Green Day

Rights Builder User Interface

Semantic Store

ddex:Internet

ddex:AdSupported Streaming

Isrc:USREV0500293

Rights Language Mapping

Digital Operations (DDEX)

<isrc>USREV0500293</isrc>
<DealTerms>
  <ValidityPeriod>
    <StartDate>2005-11-15
    </StartDate>
  </ValidityPeriod>
  <Usage>
    <UseType>AdSupportedStreaming
    </UseType>
    <DistributionChannelType>
      Internet
    </DistributionChannelType>
  </Usage>
  <TerritoryCode>US
  </TerritoryCode>
...
Vision

• Following Linked Data principles, starting from just fragment URI…

URI a ma:Image
dct:title “EBU HQ”
dct:copyright URI
...

HTTP GET
text/ini3

HTTP GET
image/jpeg

Content

URI
Web-scale Copyright Management
Thank you for your attention

More details:
http://community.mediamixer.eu
http://rhizomik.net/mediamixer
http://rhizomik.net/ontologies/copyrightonto

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