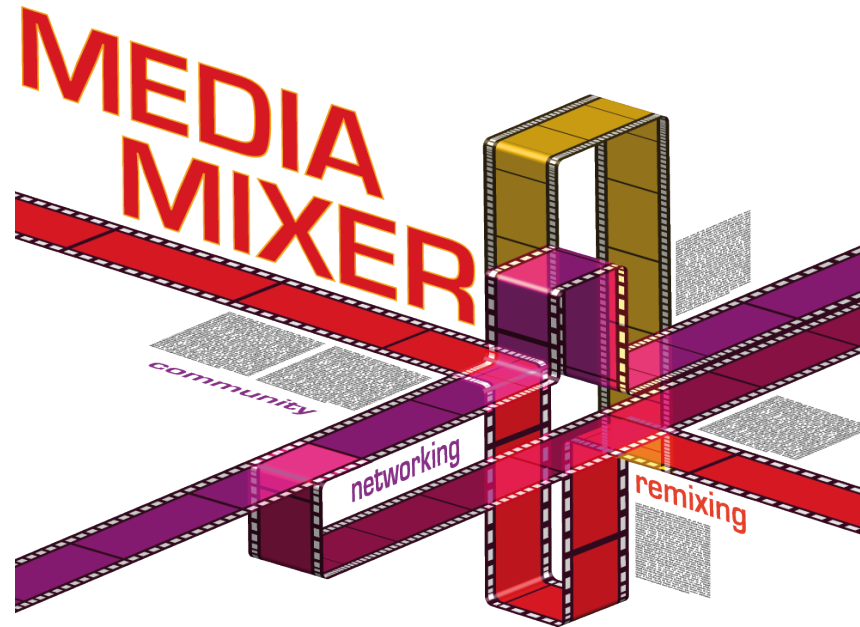


# Semantic Technologies for User Generated Content Copyright Management



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MediaMixer Innovate  
April 4th, 2014, London

# Use Case



- Pilot project at **Sony DADC**
- Together with DAM consultancy and DDEX<sup>1</sup> experts

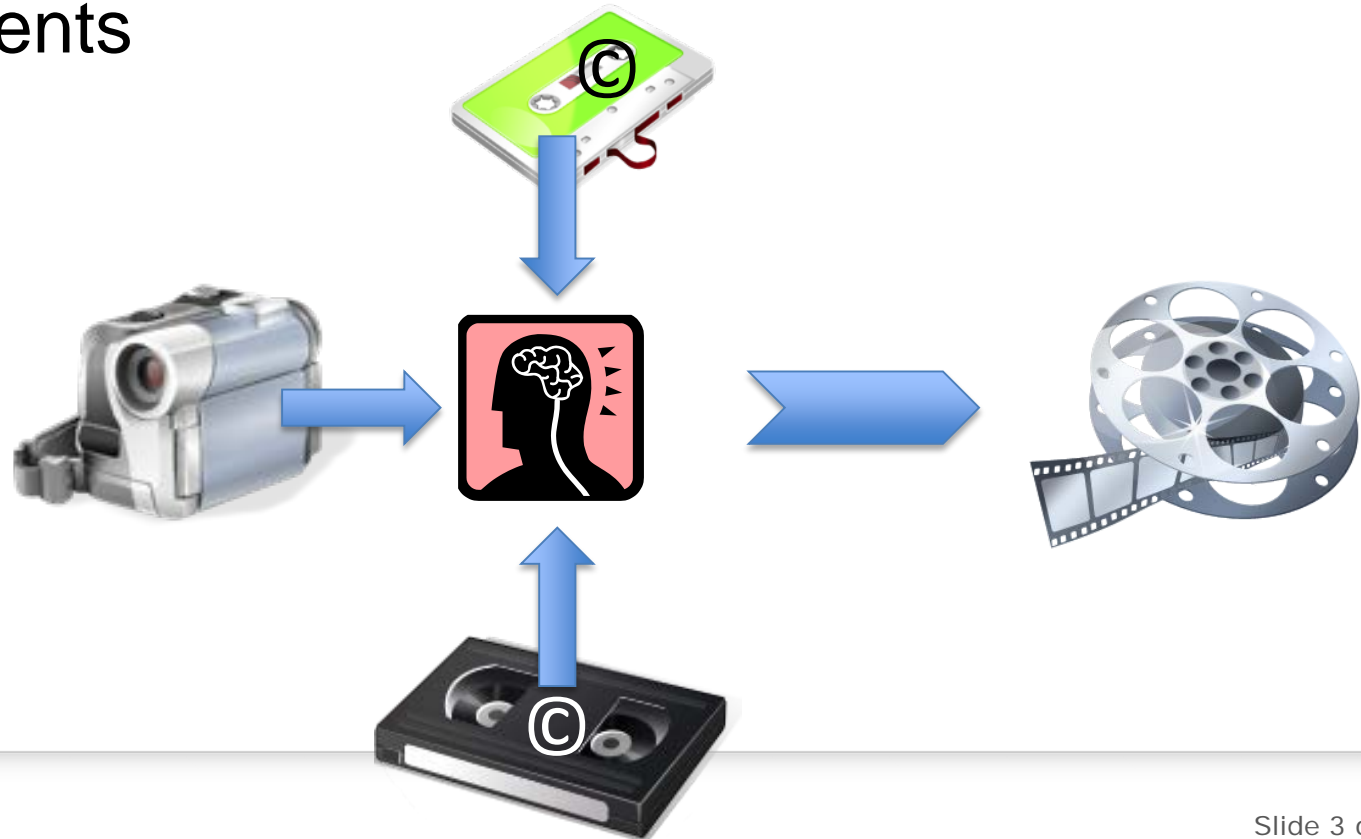


<sup>1</sup> Digital Data Exchange, metadata standard for the digital supply chain

# User Generated Content (UGC)



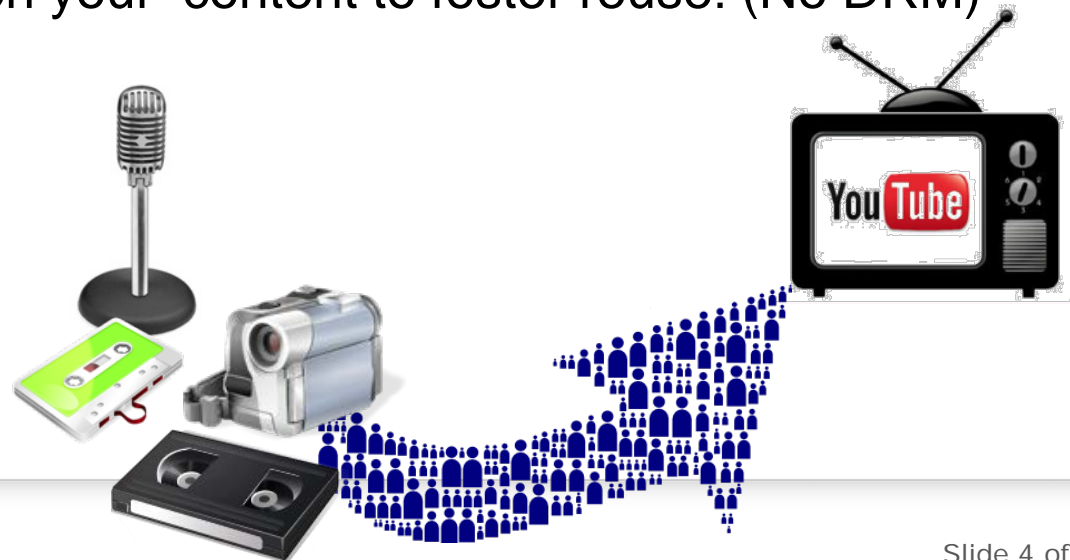
- User Generated Content, user content remixing copyrighted media fragments



# Business Models



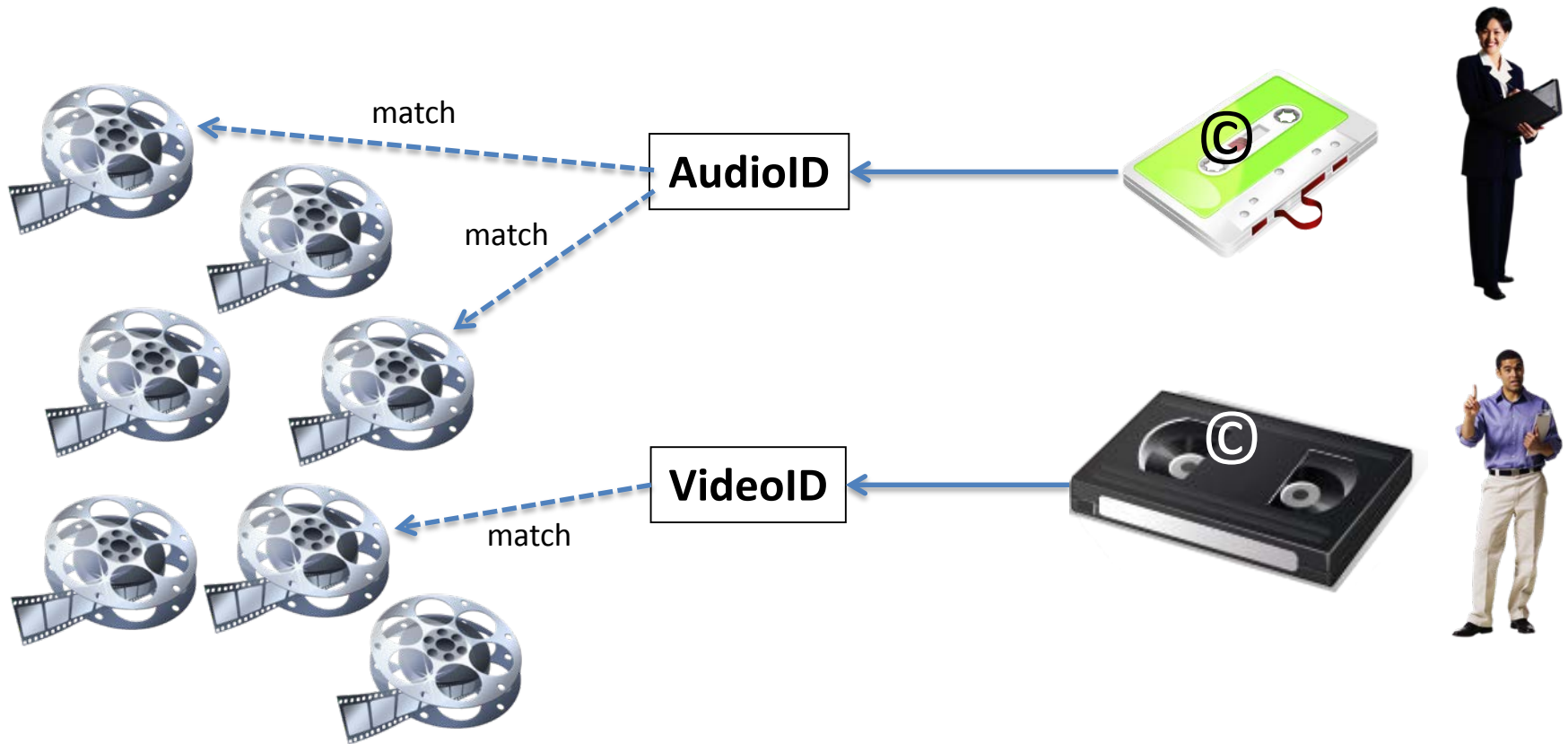
- Web media business models go **beyond digital** version of “**copy/distribute**” vinyls, cassettes, CDs, DVDs,...
- Growing: **streaming** (Spotify, Pandora, Netflix, Hulu...)
- Promising: big scale **remixing** (make money if others reuse your content), **User Generated Content** (UGC)
  - **IMPORTANT**: open your content to foster reuse! (No DRM)



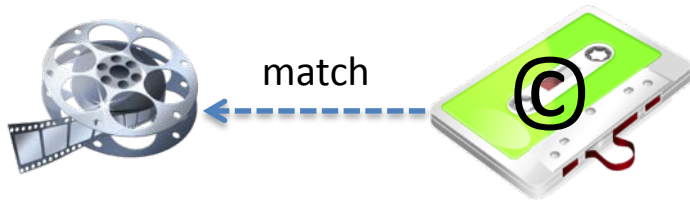
# Tracking Copyright in UGC



You Tube™ AudioID & You Tube™ VideoID



# Monetizing UGC



Choices:



Block



Track



Monetize

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

# 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

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- Requirements:
  - Scalable (largely **automatized**)
  - Takes **into account**:
    - **Contracts**

“...all rights on the live version but studio version just in the US.”
    - **Policies**

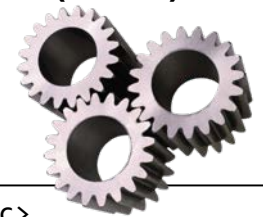
“...artist does not want his music together with violent images”.
    - **Rights Expression Languages**

E.g. DDEX metadata:  
<UseType>OnDemandStream</UseType>  
<TerritoryCode>Worldwide</TerritoryCode>



“Bullet In A Bible”  
– Green Day

Digital Operations  
(DDEX)

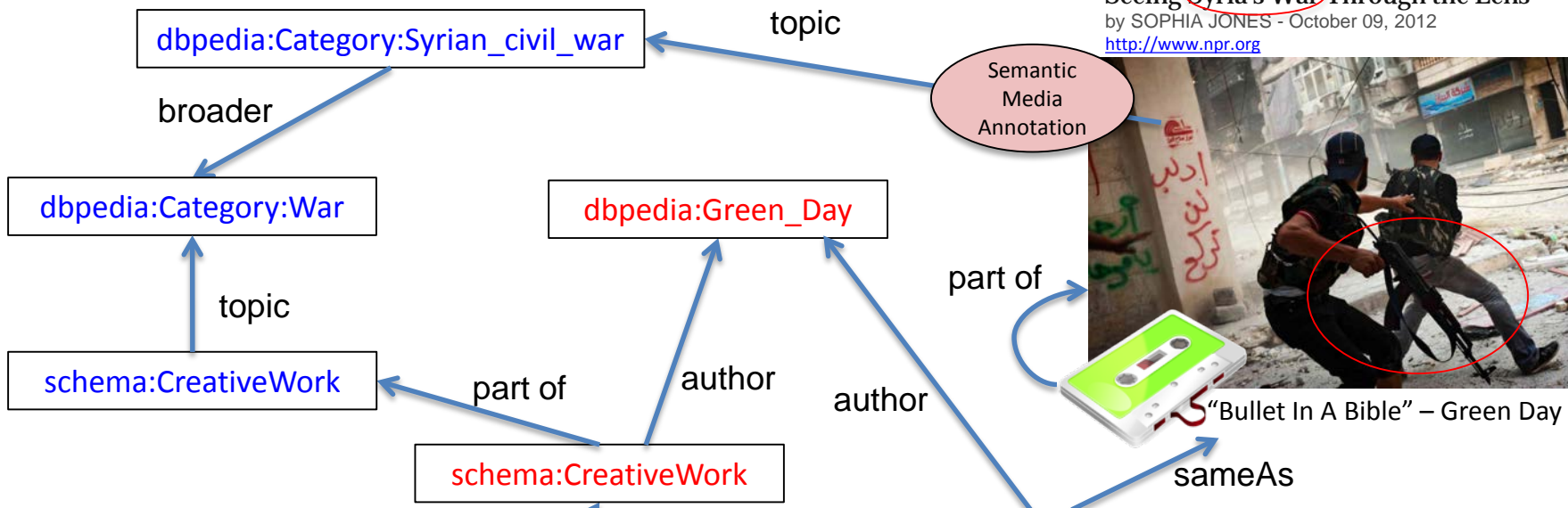
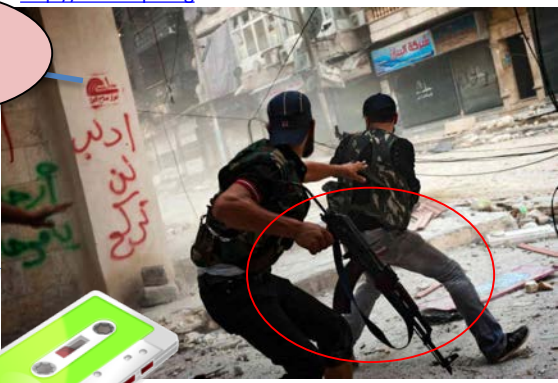


Monetize “Bullet in a  
Bible” in YouTube.com?

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...

```
<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"

Rights Builder  
 User Interface

**Disagree**

Semantic Store

**Agree**

Rights Language  
 Mapping

Digital Operations  
 (DDEX)

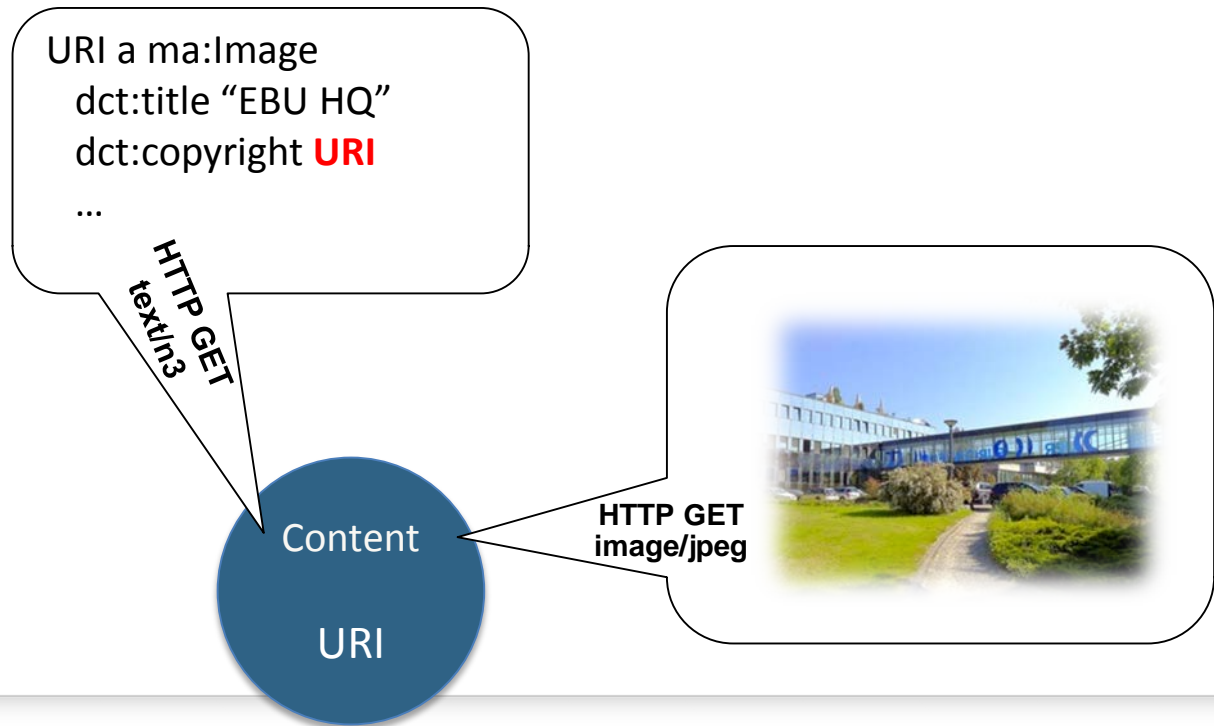
```
<isrc>USREV0500293</isrc>
<DealTerms>
  <ValidityPeriod>
    <StartDate>2005-11-15
    </StartDate>
  </ValidityPeriod>
  <Usage>
    <UseType>AdSupportedStreaming
    </UseType>
    <DistributionChannelType>
      Internet
    </DistributionChannelType>
  </Usage>
  <TerritoryCode>US
  </TerritoryCode>...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



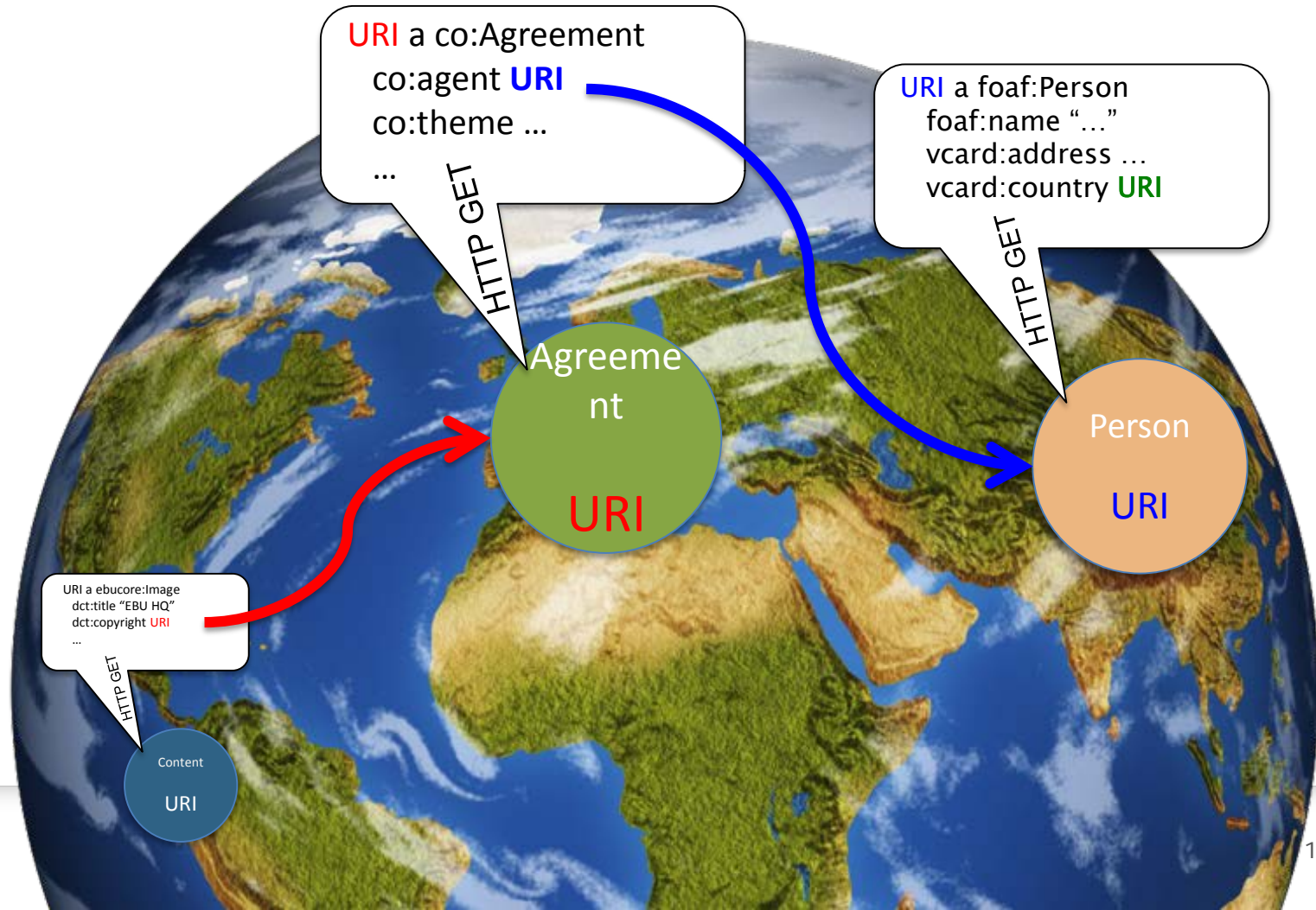
# Vision



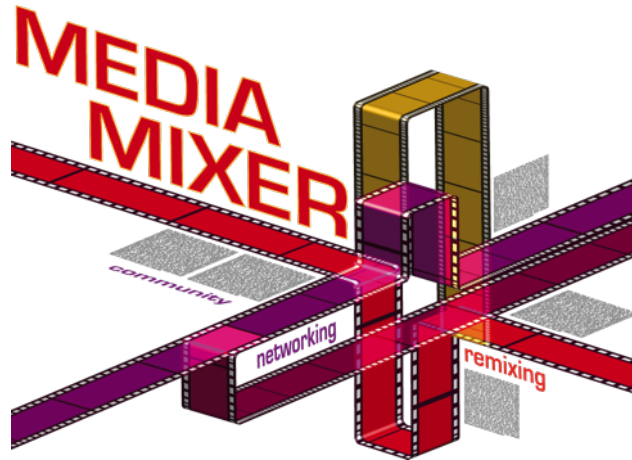
- Following Linked Data principles, starting from just fragment URI...



# 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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