IPTC Video Metadata
A new solution
for an old problem

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What's the problem

- Video data are stored in files with different file formats
  - Files are containers for the video and audio data …
  - … and for metadata.
  - A lot of different container formats exist: MPEG-2, MPEG-4 (Quick Time), Matroska, MXF, Flash Video …
  - … and they define how to deal with metadata differently
- One may use different properties for the same purpose
  - A "plug-in slot" for a metadata format shared across different file formats is available
  - But one may use metadata properties (= fields) which are defined by different standards

This leads to …

… that …

A lot of lookalikes – but not the same

Consistent Workflow Challenge

How to build a consistent metadata workflow?

- A file format = container, has genuine metadata properties

→ Are genuine metadata properties of format A
   the semantically same for format B ?

→ some may be in common, but not all

- A "shared metadata format" is open to metadata
  schemas (= a defined set of metadata properties/fields)

→ supplier A may use metadata schema Z, while
   supplier B may use schema Y

→ some properties may be in common, but not all

Conclusion: you need to build a system which is able to
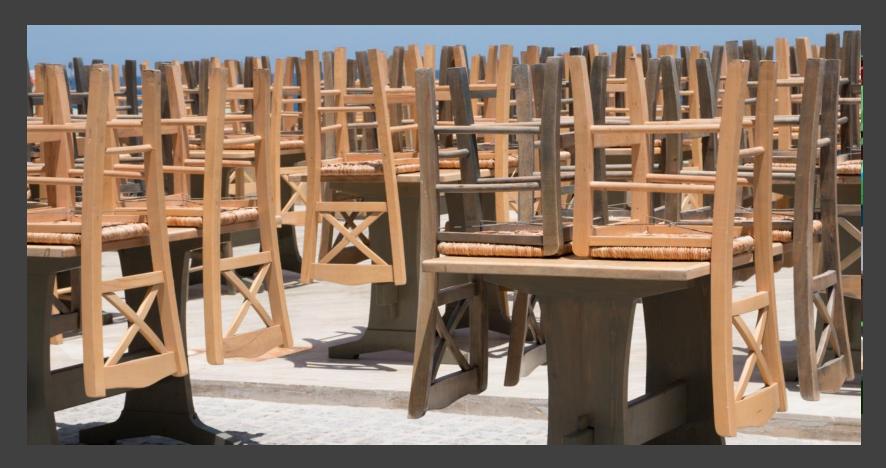keep the properties synchronized.

IPTC's Proposed Solution

A generic metadata schema

- It should include the most wanted metadata properties
- … but not too much, be not too granular

A flexible way of technical implementations including

- an agreed way for embedding the metadata into files by a "shared metadata format" – IPTC proposes XMP
- an agreed way for exchanging metadata by an video-external file – IPTC proposes EBUcore
- an agreed way how to store IPTC properties by container-type specific properties
- an agreed way how to keep the different implementations in sync.

The Goal

Video Metadata – still flexible but more consistent

IPTC VMd Draft 2: Overview

A set of metadata properties

- about 20 describing what can be seen and heard
- about 10 providing rights related information
- less than 10 for administrative purposes
- about 25 for technical characteristics

For each property is defined

- a name
- a definition of the semantics (= for what data it should be used)
- a basic data type (text, date, identifier, number, structure)
- how often it may occur in metadata about a piece of video

Such a set of properties can be applied

- to the video as a whole
- to a part of the video defined by time/frame delimiters

IPTC VMd: generic descriptions

The IPTC Video Metadata provides fields for describing a video:

- Title

- Headline

- Description

- Keywords + terms about the video from Controlled Vocabularies

- Genre + Shot Type

- Dopesheet

- Transcript

IPTC VMd: for entities

- The IPTC PhMd Std provides fields for entities associated with an image:
- Location from where the video was shot
- Location(s) shown in the video
- Person(s) shown in the video
- Featured organisation(s)
- Event(s) shown in the video
- Object(s) shown in the video

IPTC VMd: for rights & licensing

The IPTC Video Metadata provides fields for asserting rights and licensing a use of a video:

- Many variants of Creator (director, … of photography)
- Many variants of Contributor
- Copyright Owner + Copyright Notice + Copyright Year
- Supplier of this copy of the video
- Licensor of this video
- A structure for expressing what use of the video has been licensed

IPTC VMd: for administration

The IPTC Video Metadata provides fields for administrative purposes:

- Date Created
- Date Released
- Date Last Edited
- Video Identifier + version
- Registry Entry
- Feed Identifier
- Rendition Type
- Language Version
- Storyline Identifier

IPTC VMd: technical characteristics

- The IPTC Video Metadata provides fields about technical characteristics:

- Orientation, Media Type, File Format, File Duration, Editorial Duration

- Frame Size, Signal Format, Signal Aspect Ratio, Display Aspect Ratio, Stream Count

- Video coding, Video Profile, Video Frame Rate, Video Bitrate Type, Video Bitrate

- Audio coding, Audio Channels & Layout, Audio Sample Rate, Audio Bitrate Type, Audio Bitrate

Next Steps

You are invited

- To review this draft available at
www.iptc.org/videometadata-draft2

- To comment on this draft (see this web document)

IPTC plans

- to collect feedback from creators of videos, from companies editing video from different sources, from suppliers marketing video, from video archives …
and from software vendors (2015)

- to create a widely agreed specification document (2016)

- to promote the use of IPTC Video Metadata

Thank You

… for your interest
… for your comments
… for your time

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