

Digital Watermarking

- A process by which a digital “payload” is embedded into digital media
- Imperceptible to humans with almost no impact on fidelity
- Persists with the file through format changes
- Survives $D \rightarrow A$ & $A \rightarrow D$ conversions as well as cropping, scaling, compression, etc.



Original Image



Exaggerated Watermark



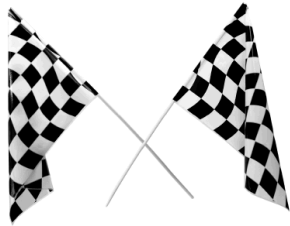
Digitally Watermarked Image

Digital Watermarking



- The payload is then detected to facilitate an action or trigger a response
- Enables a wide range of applications:
 - Copyright communication
 - Authenticate content
 - Track/monitor
 - Enhanced security
 - Enable access to additional data
 - E-commerce opportunities across devices and networks

Digital Watermarking Applications



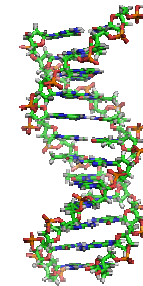
Flag-based

- Enable copyright communication and enforcement
- AACS for BluRay



Forensic

- Determine leaks in authorized distribution
- Pre-release music, post production, Digital Cinema



Content ID-based

- Enable new business models and enhance consumer experience
- Filtering, monitoring, audience measurement, monetization



What's Needed

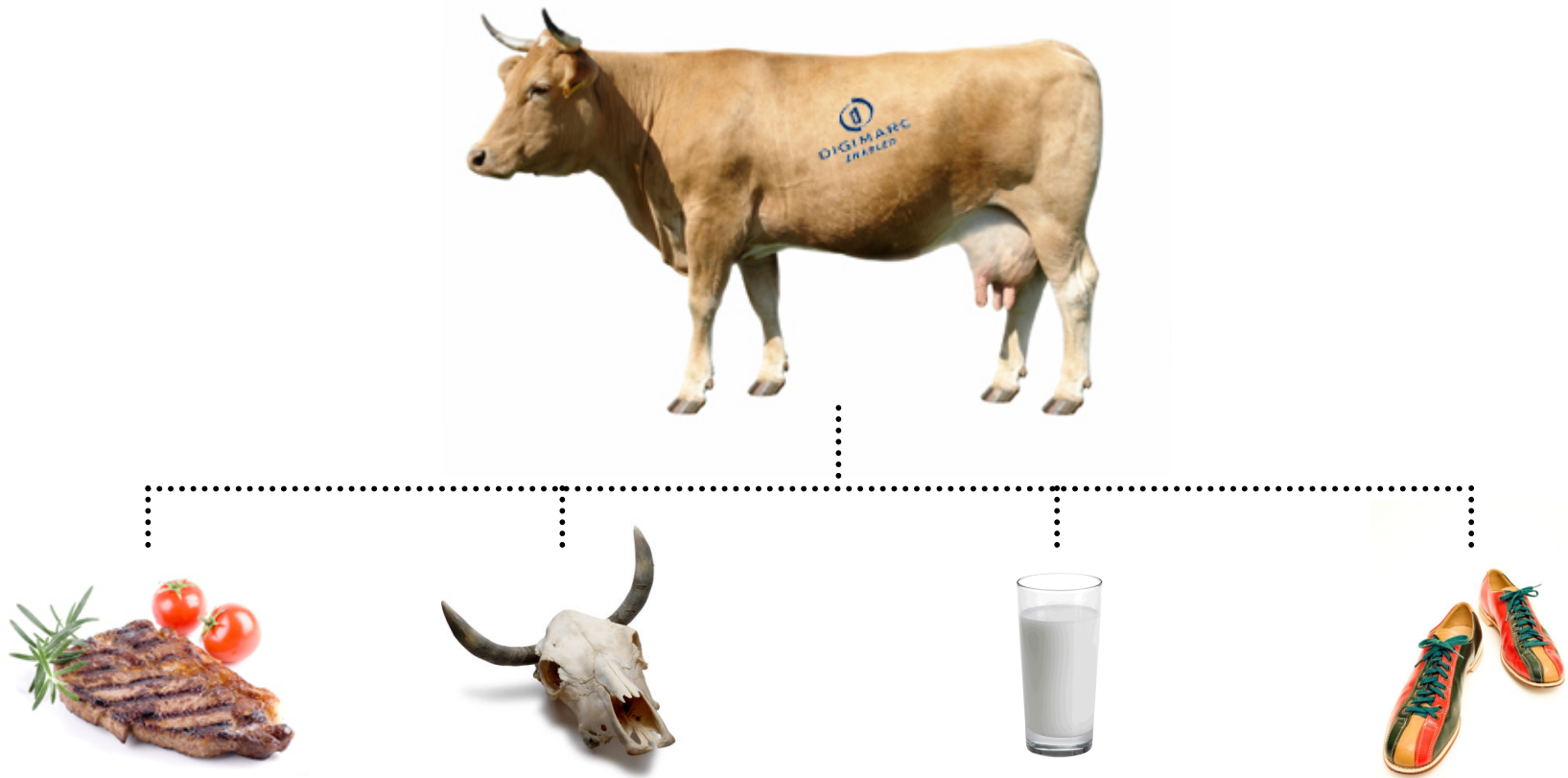


- Reduce casual piracy
- Know where your content goes and profit from its usage
- Balance protection, management, and delivery choices
- Enhance the user experience and build better relationships with fans
- **Don't Restrict Media**

Watermarking Helps Stake Your Claim



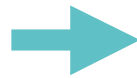
Sell What's Yours in Any Way You Choose



Change the Metaphor



DRM Cop



DWM Accountant

DIGIMARC



Enriched Media. Enriching Lives.

Thank You