JPEG Privacy & Security
Introduction and Scope

Prof. Touradj Ebrahimi

JPEG Convener

Copyright management remains an issue!

JPEG Security & Privacy

- The vision of JPEG Security & Privacy is not to put DRM into legacy JPEG

- It vision is to:
  - Enable end-users to protect their genuine security and privacy issues if they choose so.
  - Offer the exact same experience for those who don't need it!
  - It is not the intention of JPEG Committee to standardize DRM but it is not its intention to prevent it neither!
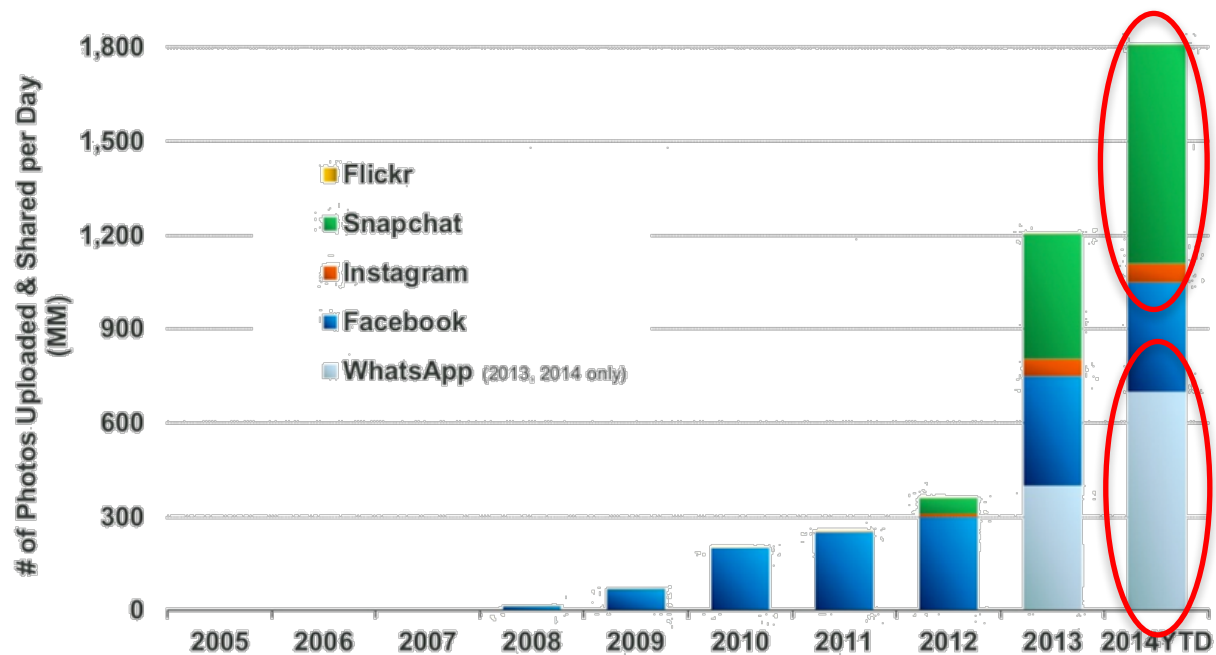

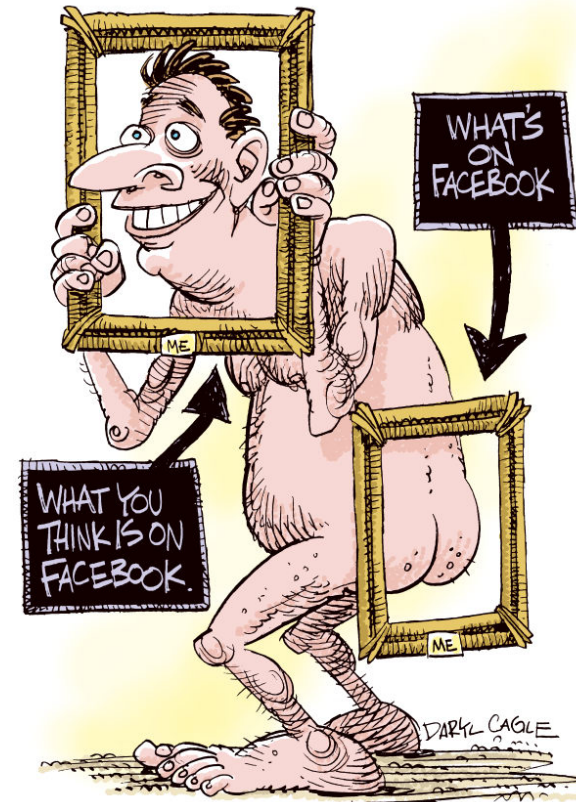Are you good or evil?

Privacy is becoming a concern!

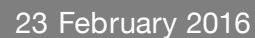Source: KPCB 2014 Internet Trends, estimates based on publicly disclosed company data.

Why is privacy protection so difficult to resolve?

Why is privacy protection so difficult to resolve?

- New technologies to better analyze, annotate, search and interpret data
- Lack of awareness and education
- Lack of incentives from those who can contribute to solutions

Social media/networks business model

- User profiling

- Targeted advertisement/marketing

There's a fine line between "Facebook takes your privacy seriously" and "Facebook takes your privacy, seriously"
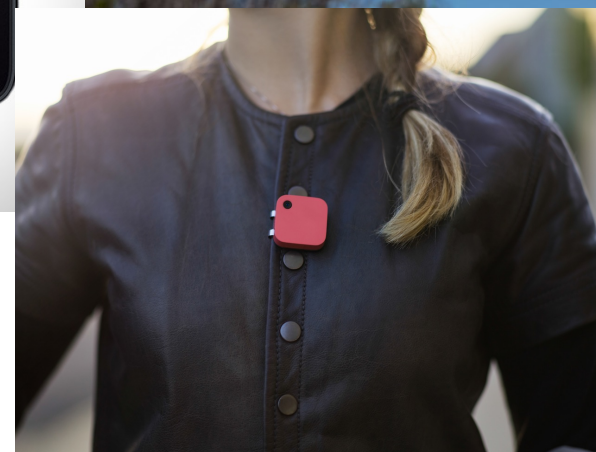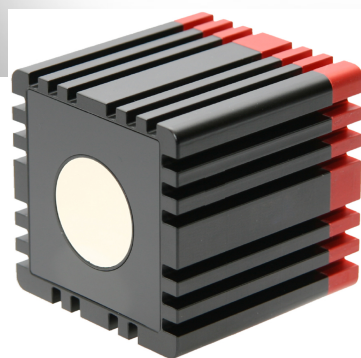
Target Customer

JPSEC: Secure JPEG 2000

- Confidentiality via encryption and selective encryption
- Integrity verification
- Source authentication
- Conditional access
- Registered content identification
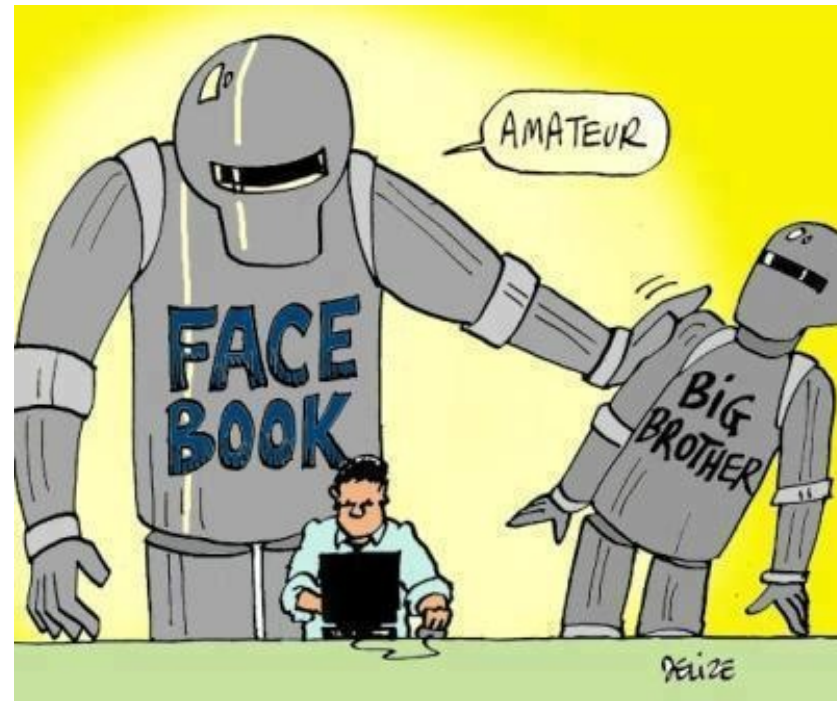- Secure scalable streaming and secure transcoding
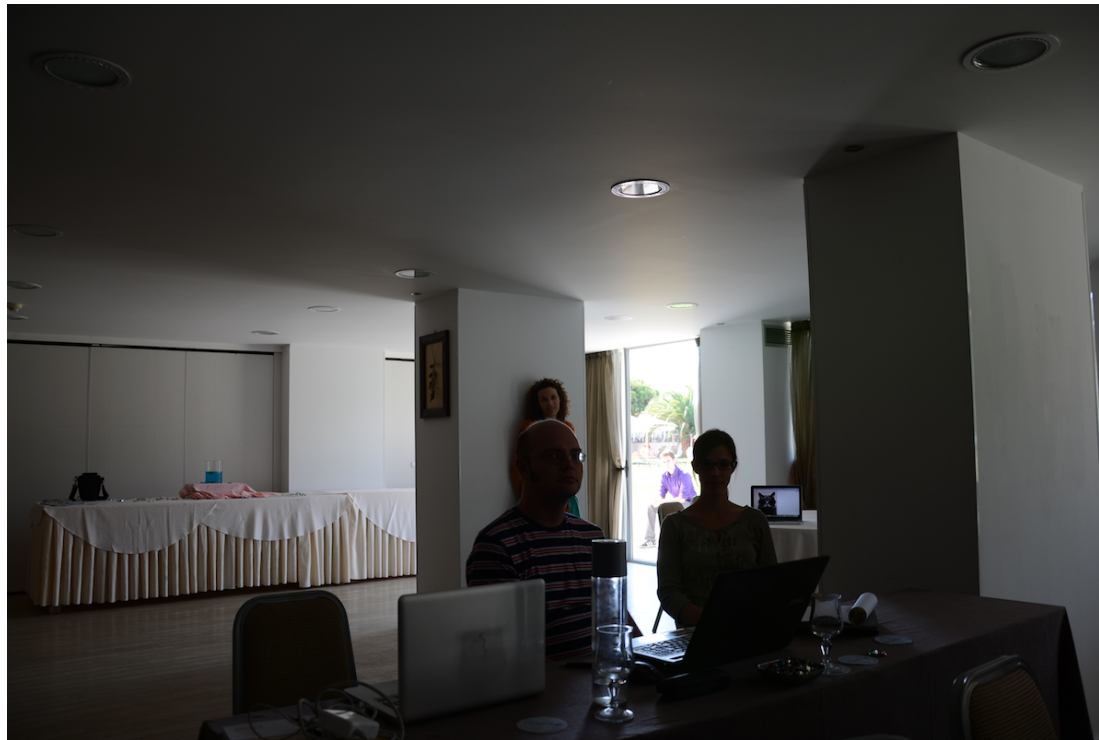
Let us not forget the future of imaging!

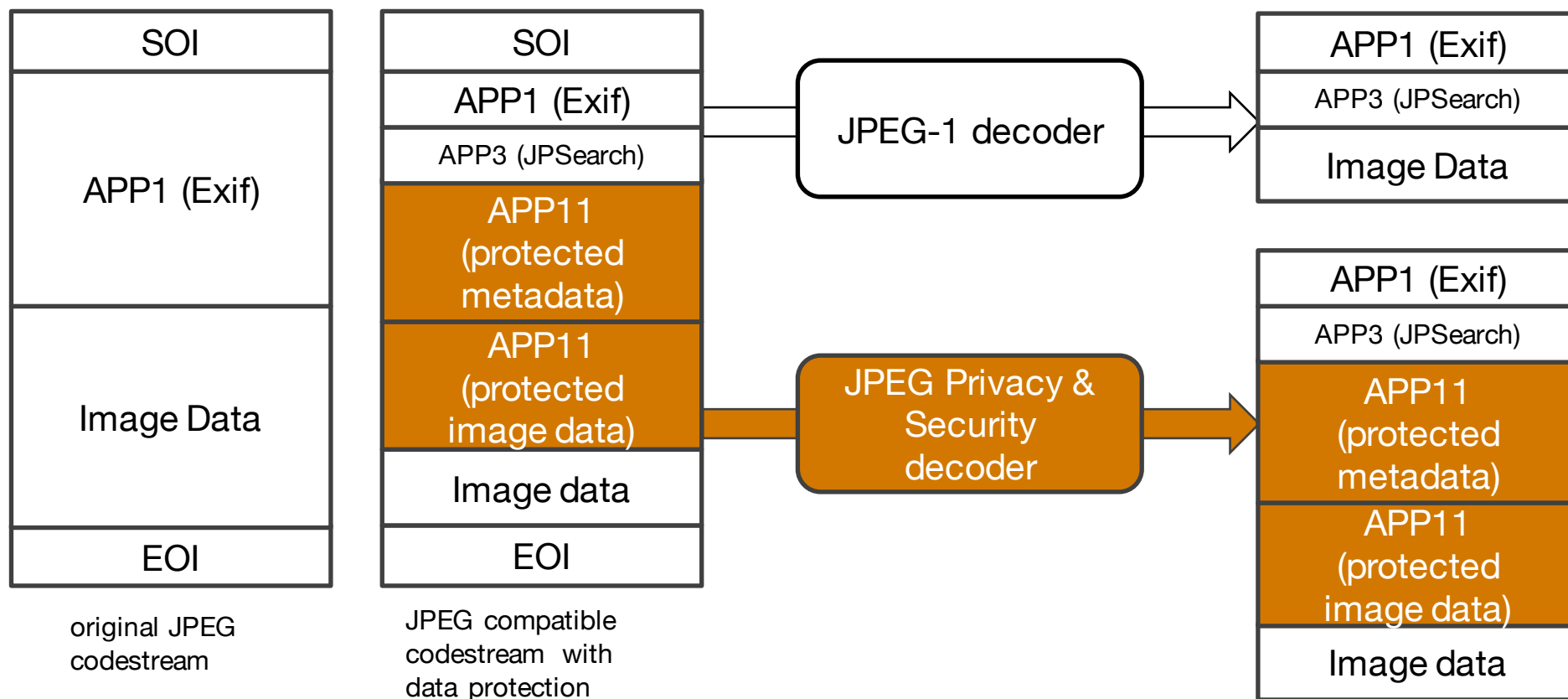# Impact of new imaging on privacy and security

LDR image

JPEG

HDR image

JPEG Privacy & Security

original JPEG codestream

JPEG compatible codestream with data protection

Looking forward to an exciting workshop