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# Artificial Intelligence, Disinformation, Deepfakes and the Complex Legal Terrain

**A new era of business risk.**

***Presented to ISSA Colorado Springs Chapter Mini-Seminar Series***

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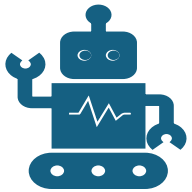
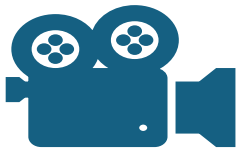
Information Systems Security Association

# Terms



**Artificial Intelligence (AI)**

**Synthetic Media**



**Deepfakes**

Audio

Video

Photos

**Misinformation**
**Malinformation**
**Disinformation**

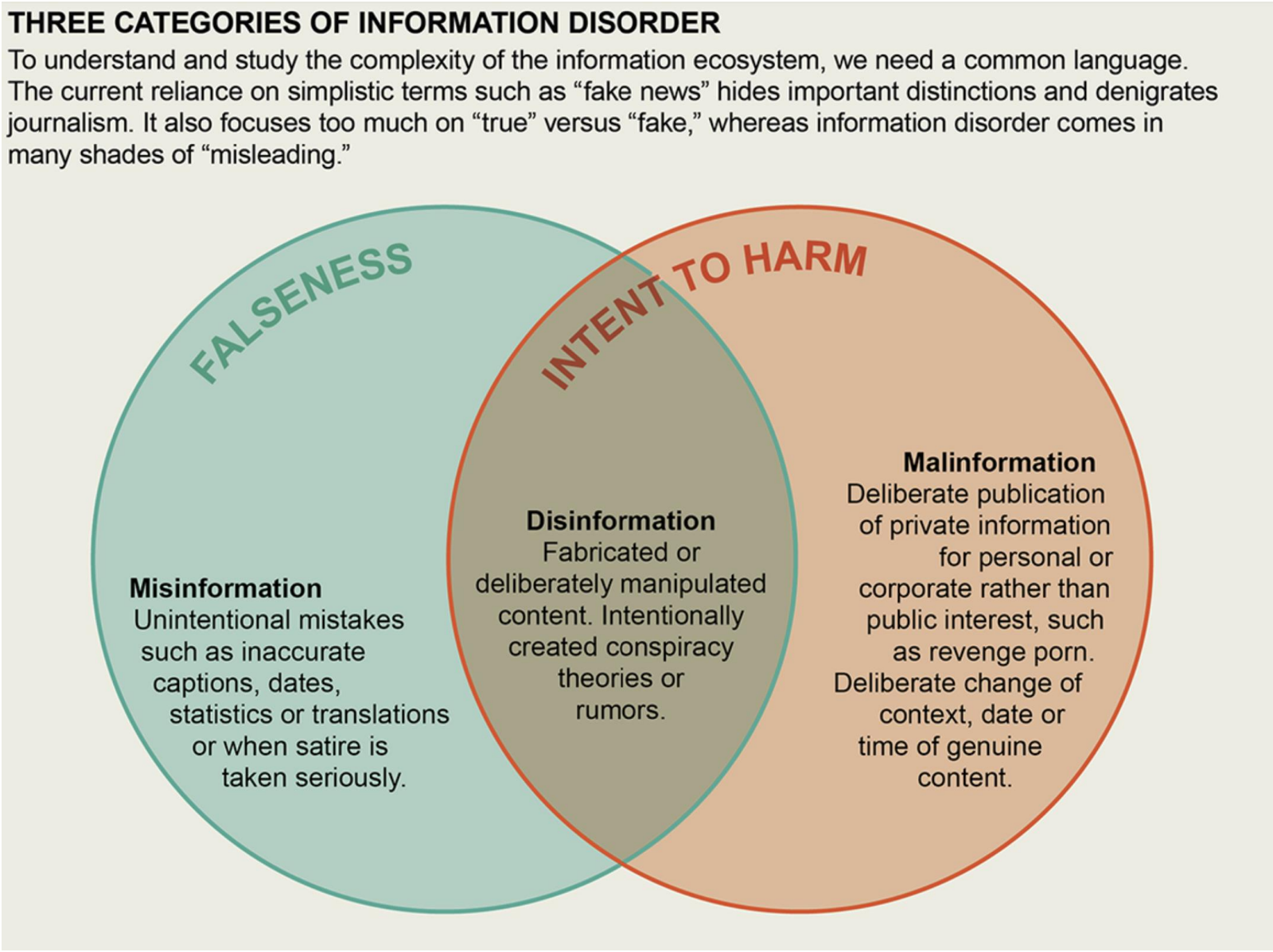
**Legal implications**

# Artificial Intelligence - Deepfake Technology

- Referred to as synthetic media
  - Automated means of manipulating data and/or media using AI
- Not new, dates back to late 1980 & 1990s
- Used initially in gaming, television and cinema productions
- Unethical, criminal and questionable methods
  - More prevalent over the last five years
- Benefits for SMBs
  - Marketing, Training, Advertising
- Risk for SMBs
  - Reputation Damage, Social Engineering Attacks, Financial Loss, Fraud, scams

# Information Disorder

- Misinformation
- Disinformation
- Malinformation




Jen Christiansen; Source: Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking, by Claire Wardle and Hossein Derakhshan. Council of Europe, October 2017

## TOP 3 deepfakes emerged in January 2024

- Voice recording of President Biden
- Pornographic images of Taylor Swift
- Remote meeting of fake executives

# How Deepfakes Will Impact Small and Medium-sized Businesses in 2024?

A Voice Deepfake Was Used To Scam A CEO Out Of $243,000

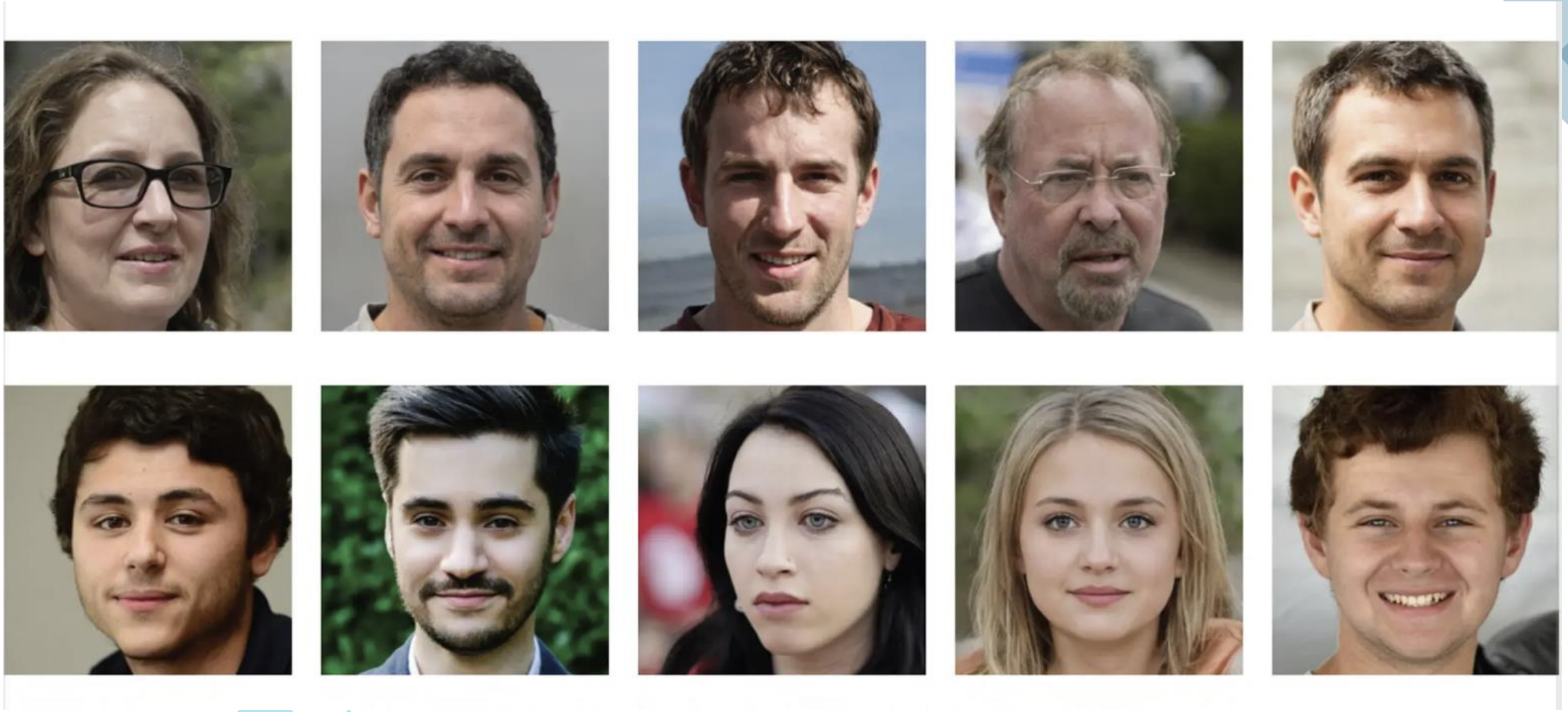
Tencent is Selling Custom Deepfake Virtual Humans for $145

**Finance worker pays out $25 million after video call with deepfake ‘chief financial officer’**


# Deepfake Photos – (sockpuppets)

- AI generated non-real people who look real
- Used to create fake personas, avatars and digital humans
- Significant use on social media platforms

# Which of these photos are real people? The others are sock puppets!



## Five faces judged as human most often

AI female 29 (93%)

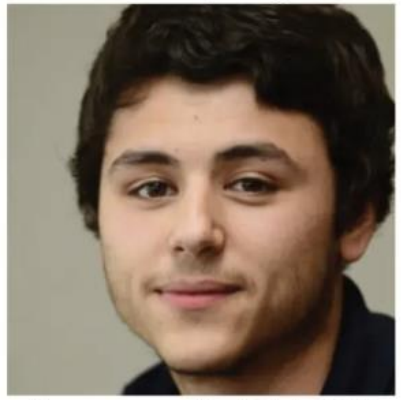
AI male 45 (92%)

AI male 13 (90%)

Human male 40 (90%)

AI male 34 (89%)

## Five faces judged as AI most often

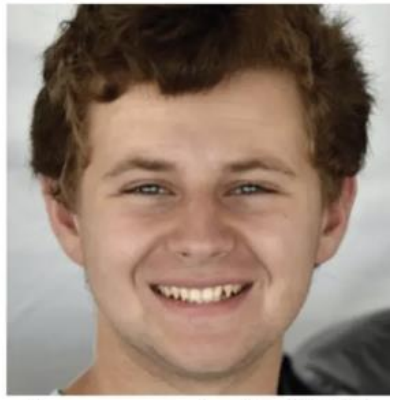


Human male 37 (90%)

Human male 47 (86%)

Human female 31 (84%)

AI female 44 (82%)



Human male 18 (79%)

# Deepfake Audio

- Used in social engineering schemes to commit fraud
  - Fooling employees to transfer money on behalf of executives
  - CEO of a UK-based energy in 2019 lost $243k

# Deepfake Video

- Used to fool people
  - Entertainment, creating new content
  - Used in misinformation/disinformation campaigns
  - Used in election and political manipulation
  - Used to discredit people and organizations

# Motivations

- Policial – meant to influence public opinion
- Revenge schemes, reputation damage
- Misinformation/Disinformation campaigns
- Social engineering to commit crimes

# Famous or Prominent Victims

Taylor Swift

O.J. Simpson

Tom Hanks

Dr. Oz

Donald Trump

Barack Obama

Nancy Pelosi

Kim Jong-un and Vladimir Putin

Volodymyr Zelenskyy

Tom Cruise

Elon Musk

# The Legal Terrain

## Social Media Response Credibility and Authenticity

- Facebook - tagging
- Google - ban lists
- X (formerly Twitter) - tagging, bans

## Legislation

### United States

- Malicious Deep Fake Prohibition Act
- DEEPFAKES Accountability Act

### China

- Cyberspace Administration of China

### United Kingdom

- Prosecution for harassment

### Canada

- Communications Security Establishment

# What can businesses do to reduce risk?

- Training and awareness is key
- Verify business transactions and interactions
  - B2B relationships
  - Vendor Relationships
- Incorporate detection technologies
- Protect all online accounts by enabling MFA
  - Banking and financial
  - Cloud based accounts
  - Third party service accounts
- Collaborate
  - Law enforcement
  - Insurance providers
  - Other resources

Questions?

# Thank you!

# Resources

***Fraudsters Used AI to Mimic CEO's Voice in Unusual Cybercrime Case,***
***Scams using artificial intelligence are a new challenge for companies***
By Catherine Stupp, Updated Aug. 30, 2019 12:52 pm ET
https://www.wsj.com/articles/fraudsters-use-ai-to-mimic-ceos-voice-in-unusual-cybercrime-case-11567157402

**Finance worker pays out $25 million after video call with deepfake 'chief financial officer'**
By Heather Chen and Kathleen Magramo, CNN
Published 2:31 AM EST, Sun February 4, 2024
https://www.cnn.com/2024/02/04/asia/deepfake-cfo-scam-hong-kong-intl-hnk/index.html

**Tencent is Selling Custom Deepfake Virtual Humans for $145**
By ERIC HAL SCHWARTZ on May 1, 2023 at 12:00 pm
https://voicebot.ai/2023/05/01/tencent-is-selling-custom-deepfake-virtual-humans-for-145/

**Are AI faces 'more human' than real ones? See if you can tell the difference**
By Social Links forAlexandra Klausner
Published Nov. 14, 2023, 4:07 p.m. ET
https://nypost.com/2023/11/14/tech/are-ai-faces-more-human-than-real-ones-see-if-you-can-tell-the-difference/

# Resources

**Misinformation/Disinformation/Malinformation**
Graphic Credit:
Jen Christiansen; Source: Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking, by Claire Wardle and Hossein Derakhshan. Council of Europe, October 2017
https://www.scientificamerican.com/article/misinformation-has-created-a-new-world-disorder/

**Digital Voice**
Digital Image Credit: https://www.boldbusiness.com/digital/deepfake-ai-digital-marketing-pros-cons-dangers/

**Digital Asian Woman**
Digital Image Credit: https://voicebot.ai/2023/05/01/tencent-is-selling-custom-deepfake-virtual-humans-for-145/

**Digital Humans, can you tell?**
Digital Image Credit: https://nypost.com/2023/11/14/tech/are-ai-faces-more-human-than-real-ones-see-if-you-can-tell-the-difference/


DIEP
NEP.
THIS IS NOT MORGAN FREEMAN.