

U.S. Special Operations Command
Command Data Office

Investing in a Digital Future

Thom Kenney
Chief Data Officer



“We are modernizing into a data-enabled command employing cloud, data, and AI technologies throughout our operations from the tactical edge to strategic decision-making.”

General Rich Clarke
Commanding General





Balancing Hardware and Humans

Humans are more important
than hardware

Quality is better than quantity

Special Operations Forces
cannot be mass produced

Competent Special Operations Forces
cannot be created after emergencies occur

Most Special Operations
require non-SOF assistance

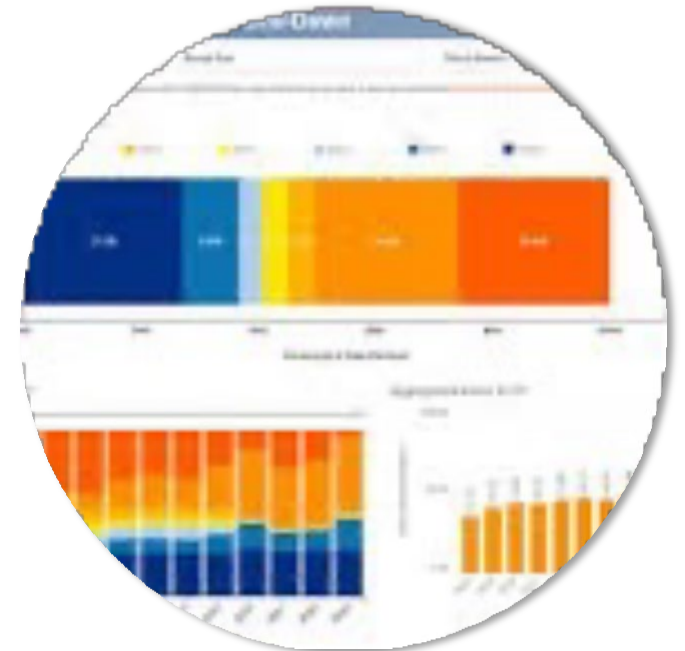
SOCOM's Digital Transformation



Mission
Command



Intelligence
Fusion



Business
Intelligence



Mission Command

- API Centric Design

- Plug and play multiple capabilities that are interoperable
- Data sharing in near real-time enabling a global operations view

- Open Architectures

- Easily add, change, or remove components of a system
- Rapidly adopt new technologies

- Platform Agnostic

- One cloud does not rule them all



Intelligence Fusion

- Real time data integration
 - Visual, RF, and spectral intelligence on a global scale
 - Open-source Intelligence (OSINT) is now a part of the battle plan
- Protection of data is key
 - Ensure data is trustworthy
 - Sharing with partners
- Understanding data at speed
 - Automatically labeling and classifying data is a mission-critical need

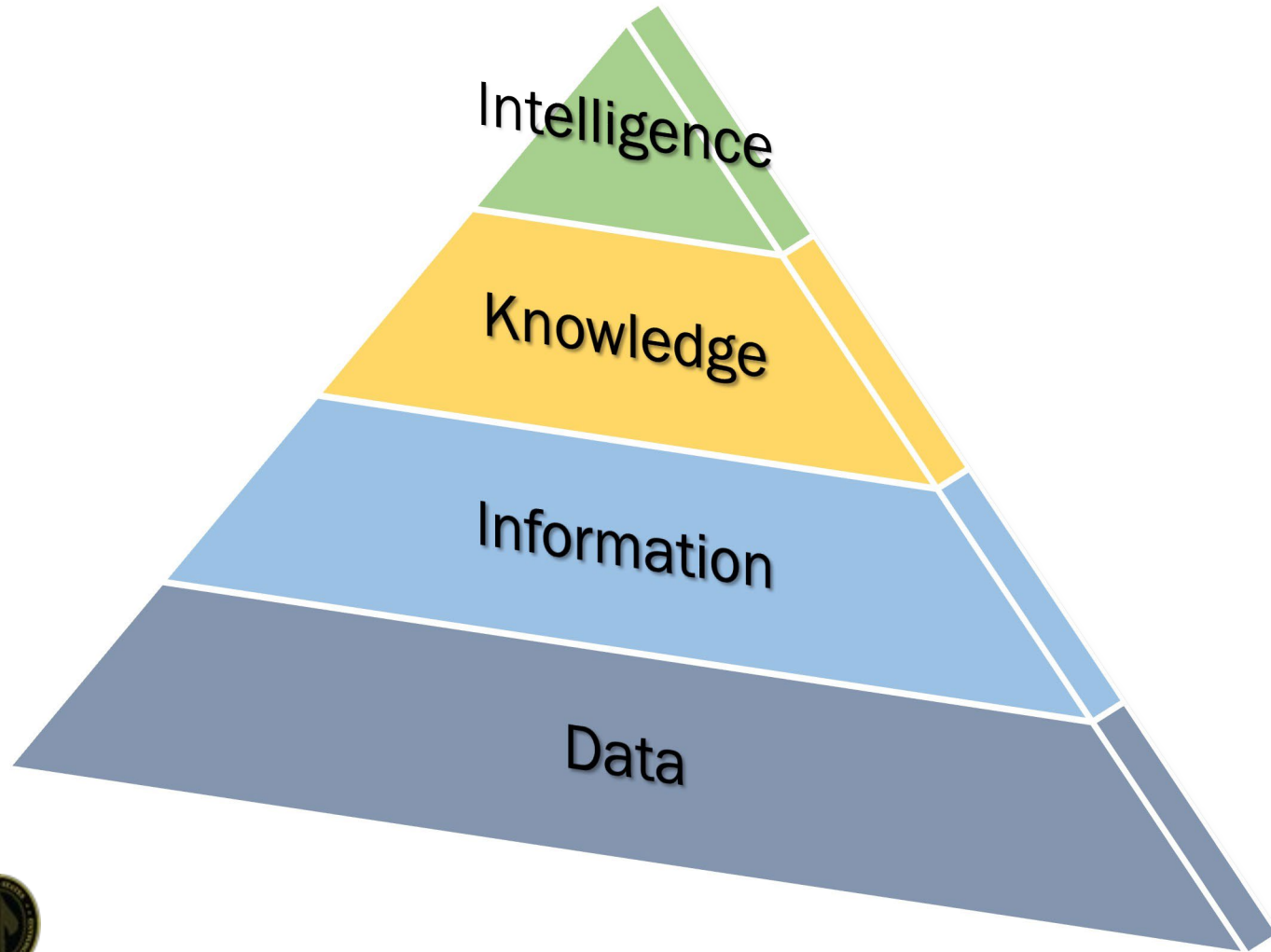


Business Intelligence

- Where's the data?
 - In 2017, the JAIC estimated collecting 22 terabytes of data every day
 - DoD has an estimated XX petabytes of data
 - Data discovery can often arduous
- Learn by doing
 - Automation can teach us a lot
 - Build data-centric skills
- It's not just operational data
 - Leveraging data and AI in logistics, personnel, and admin functions can unlock billions in capital efficiencies



Maturing in our understanding of data



“If we have data,
let’s look at data.

If all we have are
opinions, let’s go
with mine.”

Jim Barksdale
CEO of Netscape



A war-torn city street with soldiers, drones, and AI interface elements. The scene is a desolate urban environment with damaged buildings and debris. Several soldiers in military gear are positioned throughout the scene. In the foreground, a soldier is kneeling, looking towards the camera. In the background, other soldiers are engaged in various activities. The sky is filled with several drones, some of which are emitting colorful beams of light (red, yellow, blue, green) that connect to various points on the ground and buildings. These beams represent AI-powered data links or sensor networks. The overall atmosphere is one of a high-tech, AI-enhanced battlefield.

Where will AI play a role?



Thank you

```

elbow = [0, 0, 100]
x_dist = max(distortions) - min(distortions)
y_dist = max(distortions) - min(distortions)
for d in range(1, len(distortions)-1):
    x_dist_l = max(distortions[d]) - min(distortions[d+1])
    y_dist_l = max(distortions[d]) - min(distortions[d+1])
    angle = math.degrees(math.atan2(y_dist_l, x_dist_l))
    if (abs(angle - angle) > 90):
        elbow = d
    sum_elbows += 1
num_elbows = sum_elbows / len(distortions)

```

CD

