



## **“INFORMATION!” and The NEW TCO**

*Analyzing “Total Cost of Ownership” in the move to digital  
video surveillance from analog*

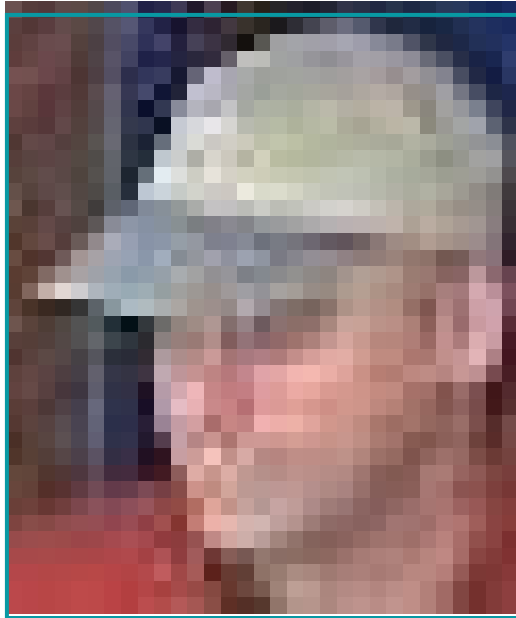
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## DISCUSSION TOPICS

- > How should security professionals define TCO for options that provide forensic evidence (information)?
- > What factors of TCO change when moving from analog video surveillance to high-resolution network video?
- > How does video data differ from video information?
- > How specifically does high resolution video reduce project costs over the entire useful life of the project?

# INFORMATION VS. JUST BITS-AND-BYTES

**DATA**



**INFORMATION**

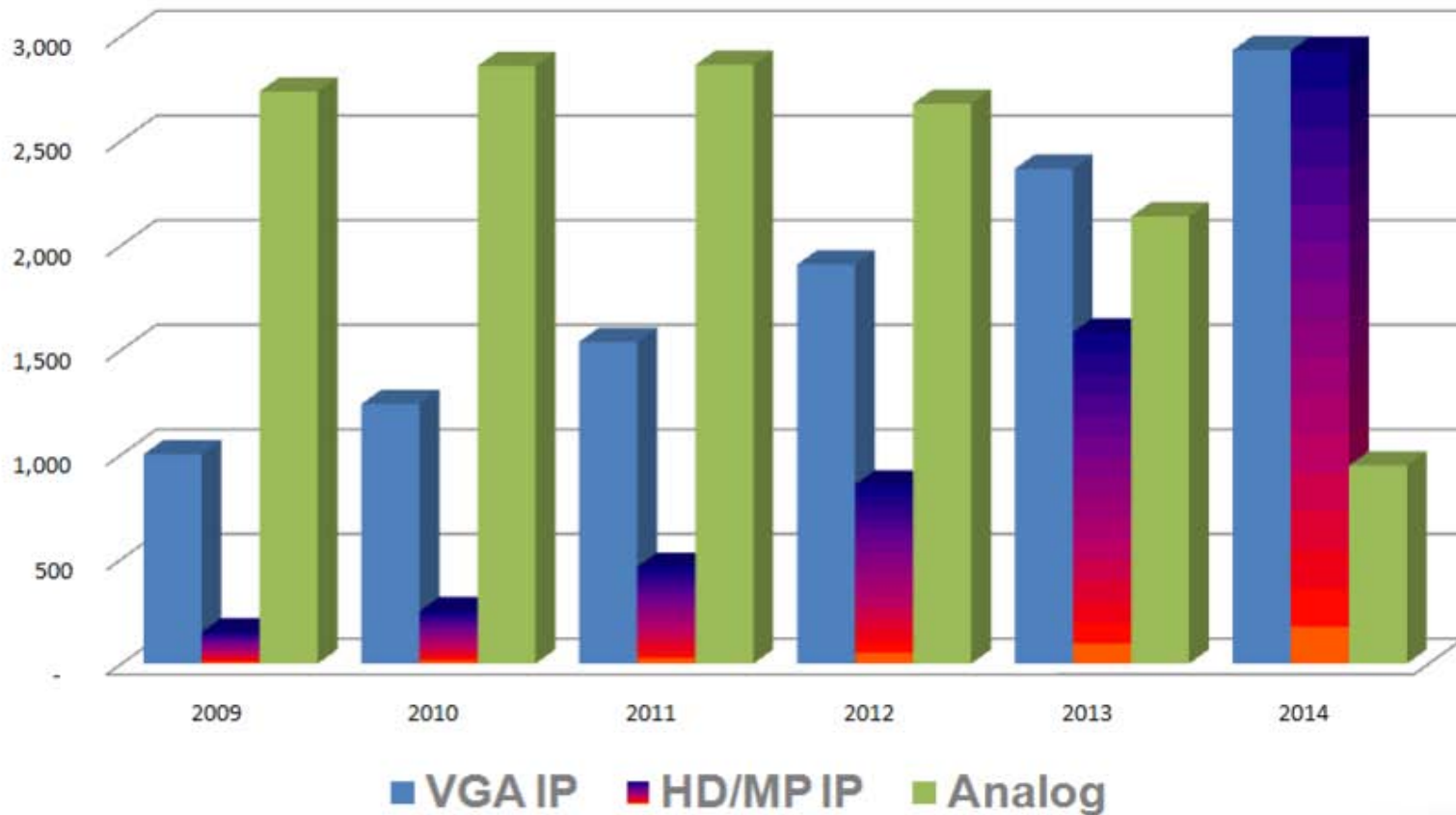


## KEY LEARNING

- > Comparing hardware costs leads to faulty conclusions
- > TCO components for IP video are different
- > The lack of a common vocabulary adds complexity
- > TCO value is found in “Best-of-Class” components
- > Differentiation benefits from post-sales considerations,
- > Quality engineering, support and service reduces TCO

# Global Camera Market

## Camera Revenue by type (\$MM)



\* Data from IMS Research, IP Video Market and Toadhill

# THE MOVE TO IP IS GROWING



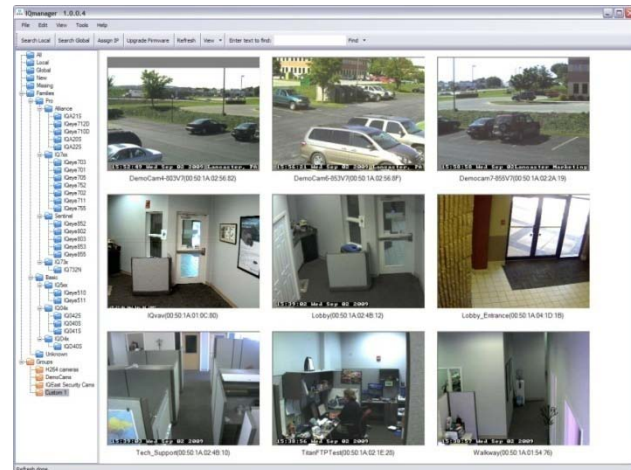
# DEFINING TOTAL COST OF OWNERSHIP

- > No single universally-accepted definition
- > Adam Smith: ROI
- > As an IT concept, TCO was popularized by Gartner research ca. 1980s to justify purchase of computers
- > “TCO tries to quantify the financial impact of deploying an **information technology** product over its **life cycle**. These technologies include **software** and **hardware**, and **training**.”\*

\*Source: Wikipedia

# KEY CONCEPTS FOR VIDEO SURVEILLANCE

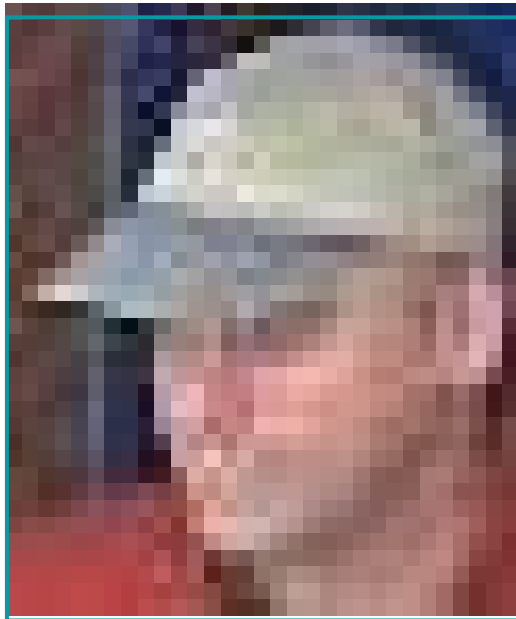
- > Information technology
- > Life cycle
- > Software/firmware
- > Hardware
- > Training/support



# IP SECURITY AS INFORMATION TECHNOLOGY

> Basic computing: GIGO, or “Garbage in = Garbage Out”

**DATA**



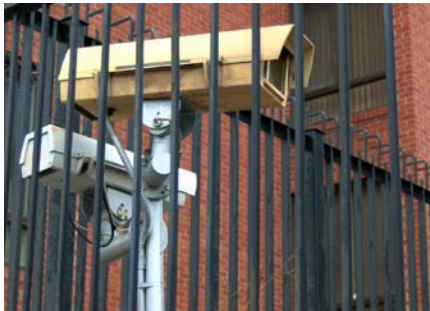
**INFORMATION**



# HARDWARE – “HARD COSTS”



**VS.**



**VS.**



**VS.**



# HARDWARE – LIFE CYCLE

**DESIGN**

**DISPOSAL**

**ACQUISITION**

**MAINTENANCE**



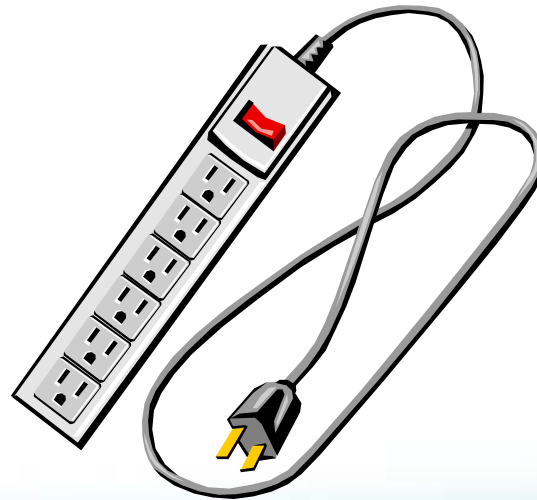
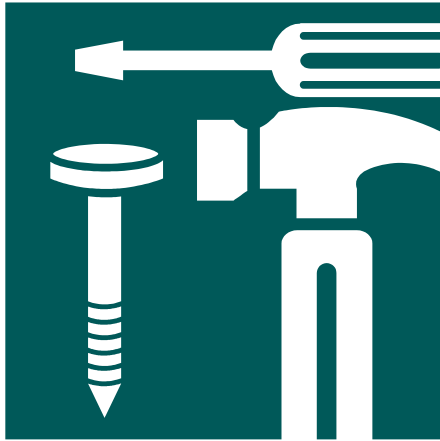
**INSTALLATION**

**ENHANCEMENT**

**COMMISSIONING**

**TRAINING**

# HARDWARE – RELATED COSTS

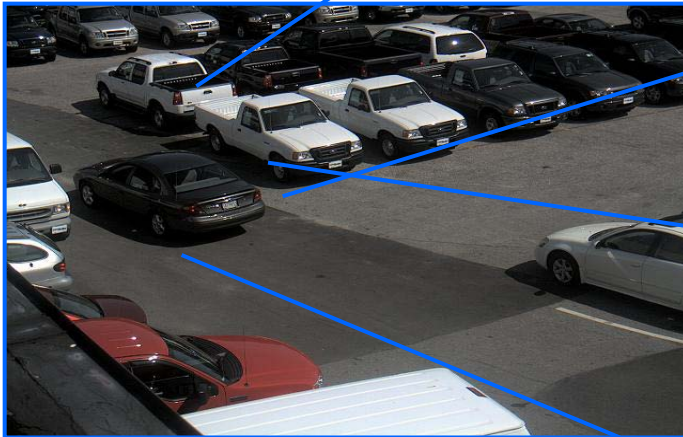




5 Mpix

# WHAT IS "HD"?

**DATA**



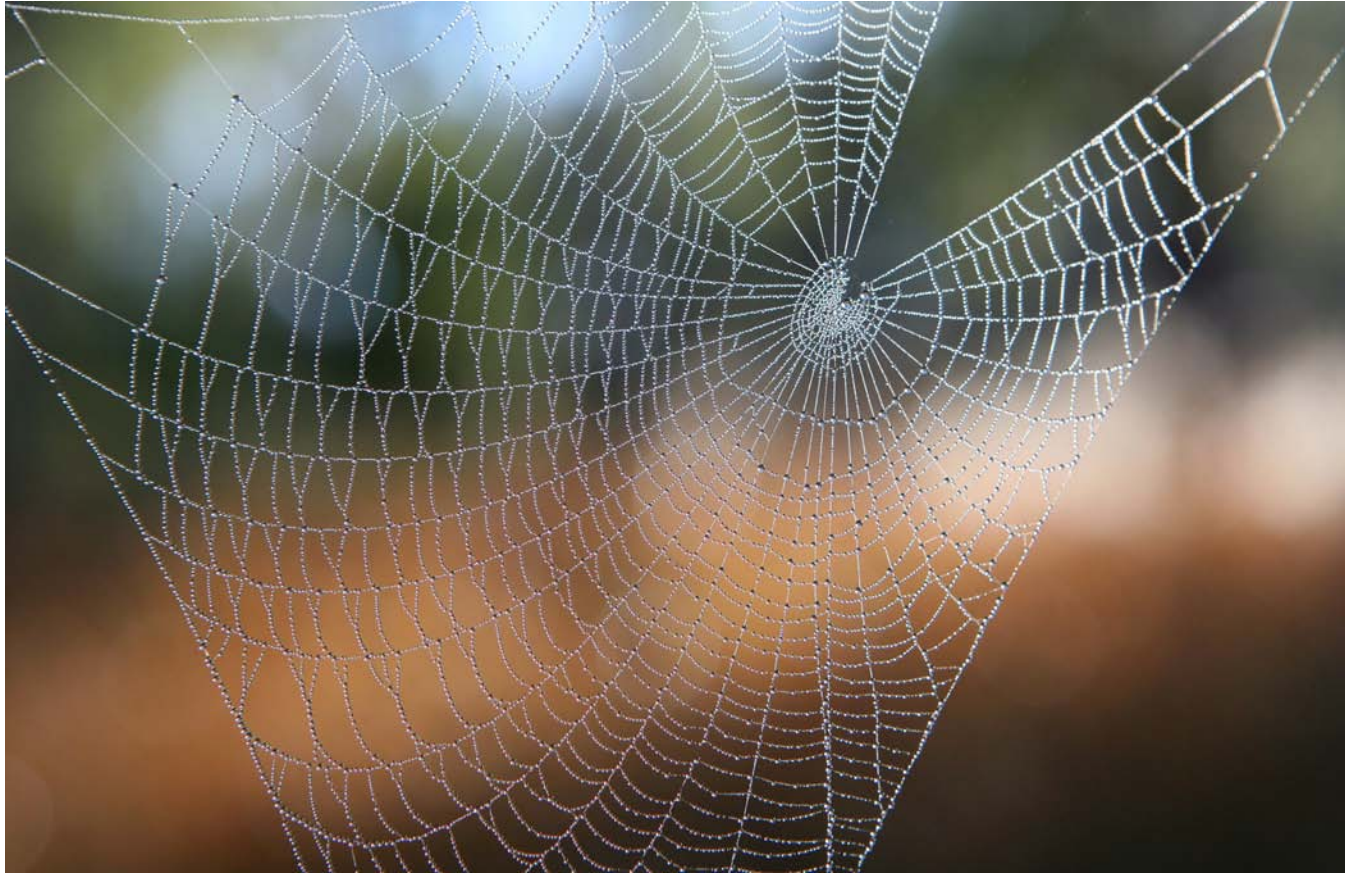
**INFORMATION**



# HARDWARE - CLOSED VS. OPEN SYSTEMS



# HARDWARE - UNINTENDED CONSEQUENCES



# HARDWARE - ENERGY SAVINGS USING POE

## Results

### Usage Comparison

	Others	IQeye
Annual Power Consumption (kWh)	17,520.00	2,847.00
Annual Cost to Operate (US\$)	1,752.00	284.70
CO <sub>2</sub> Emissions (KG)	13.14	2.14

### IQeye Sentinel Series Savings

IQeye Sentinel Series cameras	14,673.00 (kWh of electricity per year)
save you:	1,467.30 (US\$ per year)
	122.28 (US\$ per month)
	11.00 (KG of CO <sub>2</sub> emissions per year)



# FIRMWARE/SOFTWARE

- > Feature enhancement via firmware vs. replacement



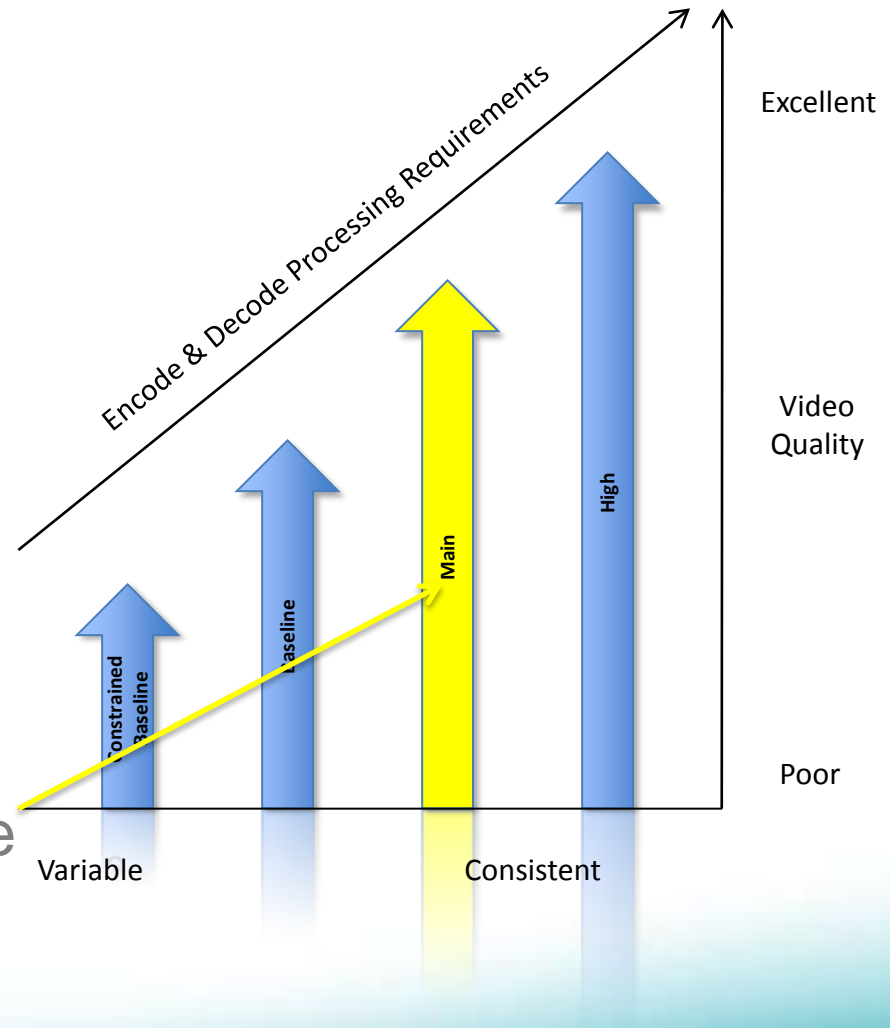
*IQeye711  
LIGHTGRABBER™ Off*



*IQeye711  
LIGHTGRABBER On*

# COMPARING COMPETING IP SOLUTIONS

- > Predictability vs. marketing hype
- > Cost of implementation vs. cost of storage
- > Enterprise class vs. consumer grade (mobile)
- > Quality of video vs. ease of implementation
- > IQinVision uses MAIN profile



# LIFE CYCLE

Q<sup>3</sup>

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# QUESTIONS AND DISCUSSION

