

From CHAOS TO SYNERGY via a WHOLE of SOCIETY Approach

Innovative
Internet Uses
& the Open Internet:
Security &
Emergency
Communications



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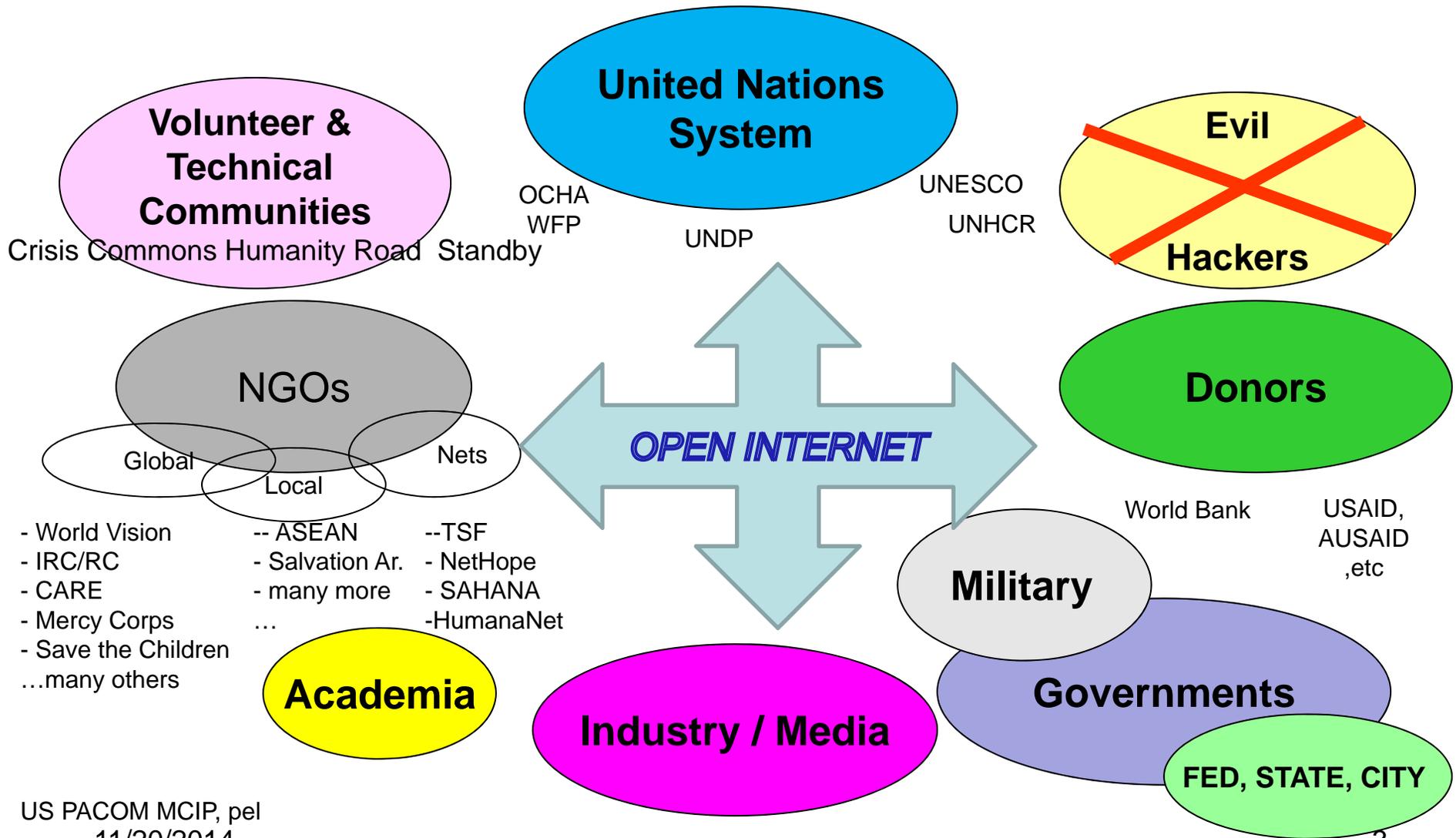
SUMMARY FOR REGULATORS

- Create Synergy via Innovation, Leadership, & Collaboration (SILC)
- Actively promote an Open Internet “Whole of Society” (WOS) approach...move beyond, to inclusive emergency communications
- Support Democratized Innovation via specific programs in key innovation areas: Wireless BB, Social Media, Unmanned Tech
- Exercise & test measurable WOS-based criteria for Wireless Infrastructure Capacity, Reliability, and Quality in Emergencies
- Move from “Thought Leadership” to “Collaborative Action Leadership”. Vigorously seek visionary public/private programs.
- Apply lessons from past successes and current programs, worldwide (CPUC ROMP/NRF/CAP, CETF, LINC, MCIP, UNWGET, UNETC, APEC/WOS, CMUSV, LLNL, NPS, CalOES, DHS, etc.)
- Make WOS-based Emergency Communications a top priority. Based on California’s experiences, the CPUC could lead an action team.

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DISASTER CHAOS

The Communications “Ground Truth”



FROM CHAOS TO SYNERGY

SYNERGY : $1 + 1 = 3$

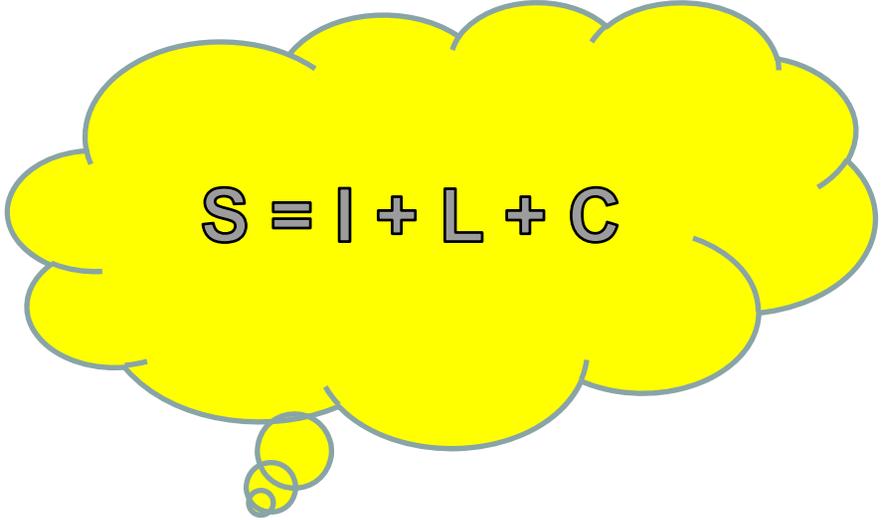
*Results are greater than the sum;
more effective, efficient, sustainable*

COMBINE:

> INNOVATION

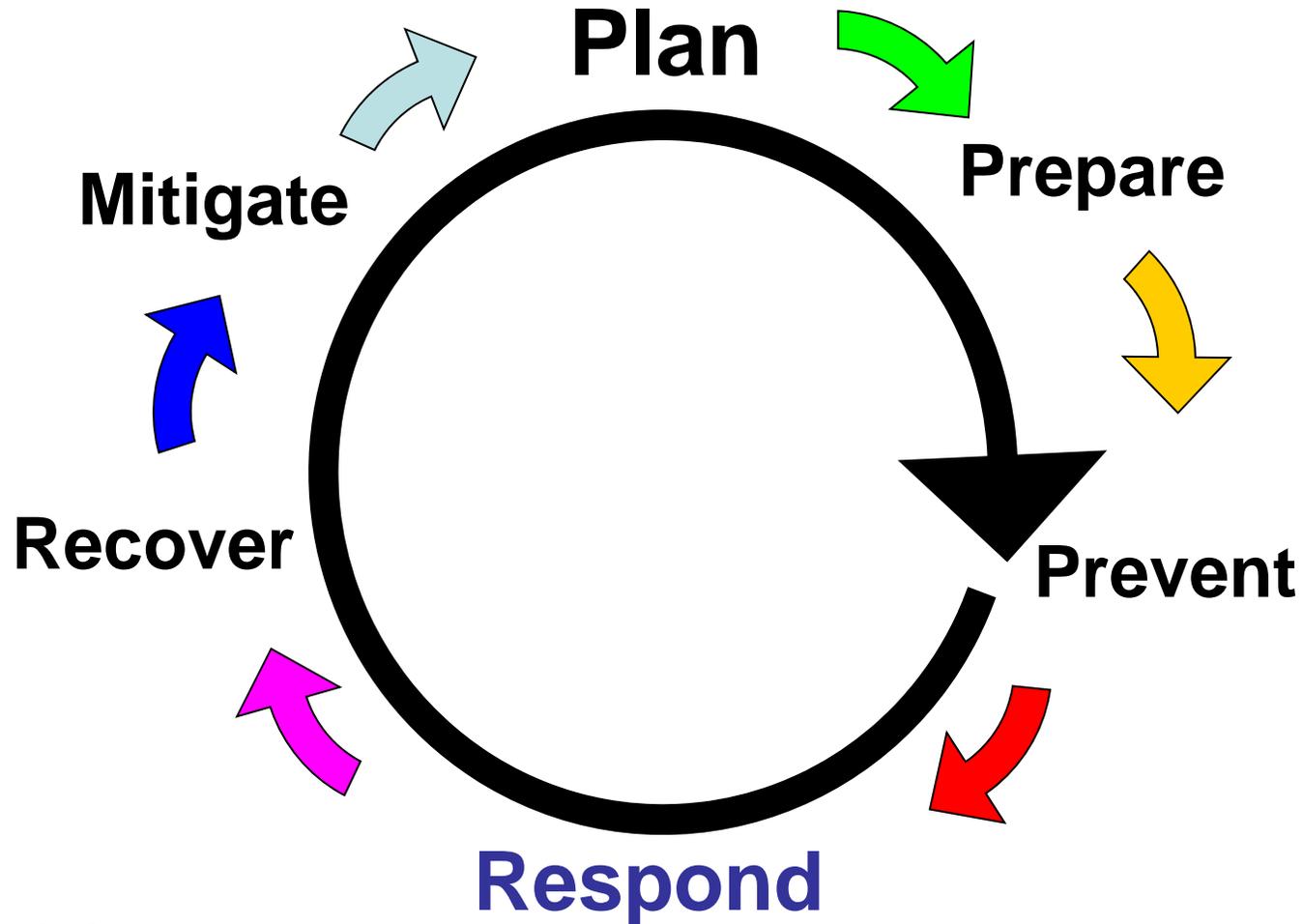
> LEADERSHIP

> COLLABORATION, *via OPEN INTERNET*


$$S = I + L + C$$

MORE THAN RESPONSE

Emergency Management Cycle: interactive comms-heavy process via Voice & Open Internet



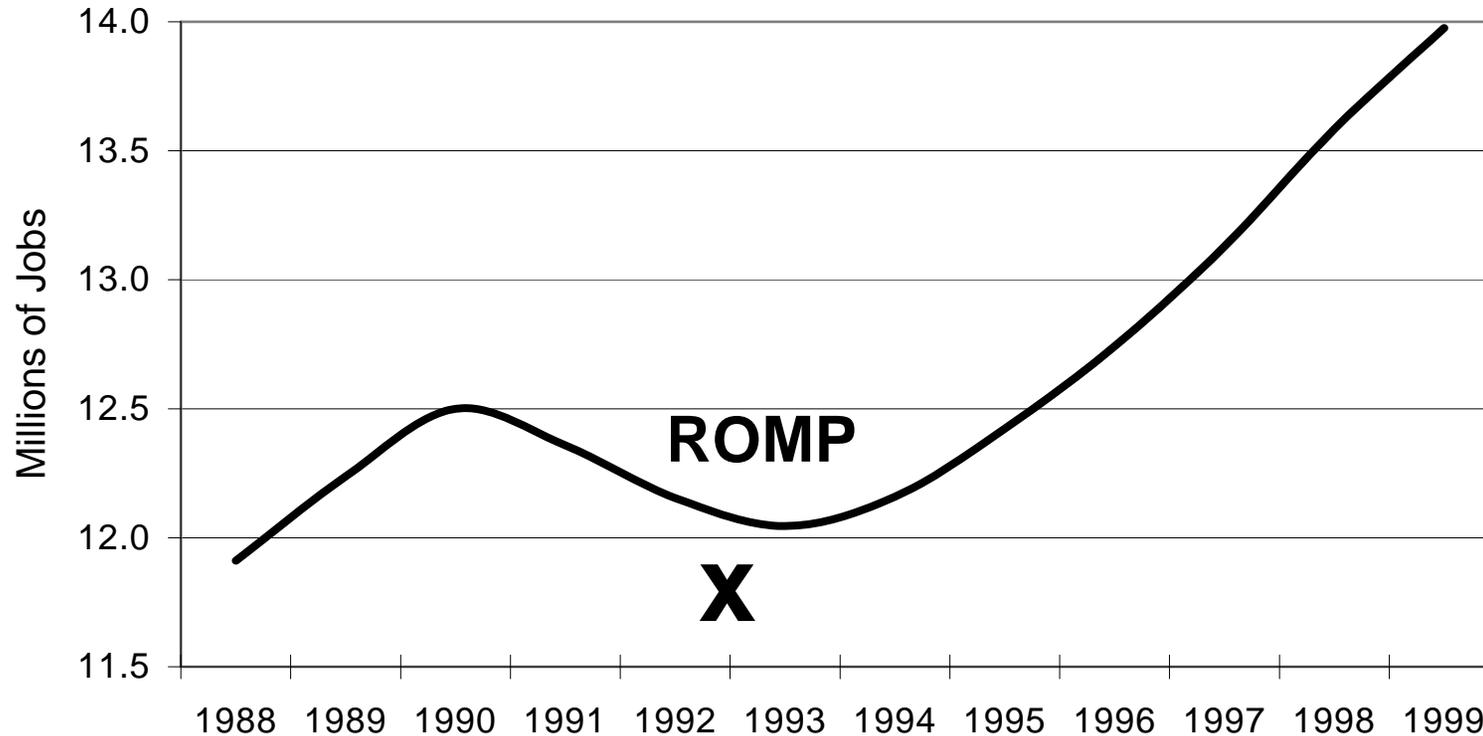
LEADERSHIP EXAMPLE : CPUC +

Digital Conversion - "ROMP" - \$400M , 2years

Rural Office Mod Program

(CPUC + PACBELL + California Consumer Advisory Panel)

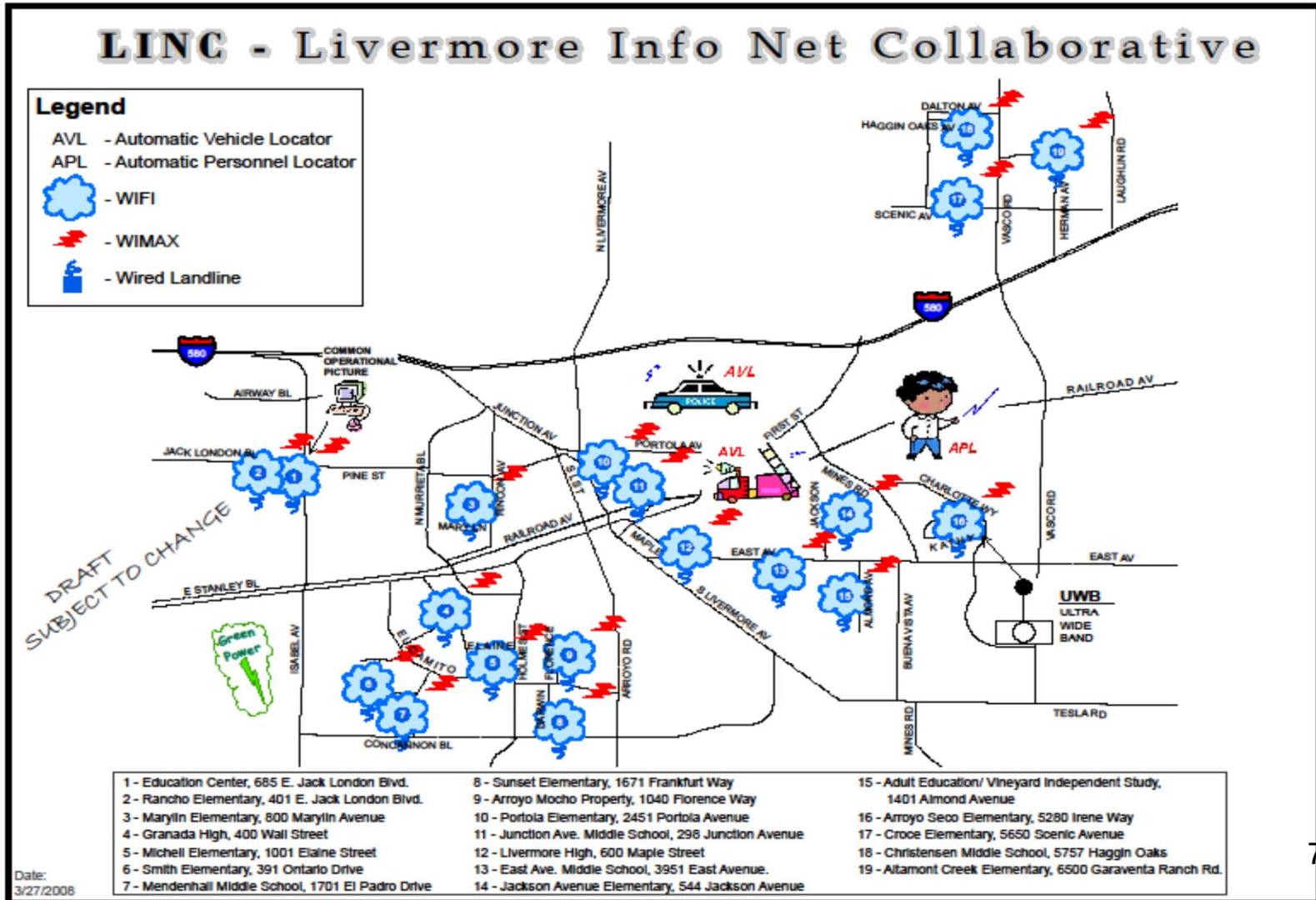
**California Nonfarm Employment
1988-1999**



SYNERGISTIC EFFECT : INTERNET COMMS = JOBS

LEADERSHIP EXAMPLE : LINC

POLICE, FIRE, SCHOOLS, LLNL, CMUSV, +



INNOVATION:THE NEW ECONOMY

Mobile Internet-Based

The New Economy, 4 aspects:

- **Fast, Global, Networked, Knowledge Worker-Based**

(California Economic Strategy Panel, "Connecting to Compete")

Communications impacts all 4 aspects, with :

- **Wireless Internet** = Home, Local, Area & Sat nets
- **User Innovation** = Lead Users: "*Democratizing Innovation*" (Dr. Eric von Hippel, MIT)
- **Unprecedented uses, synergies** : social, safety, security, health, education, sustained commerce
- ***BEST TIME, EVER, FOR EMERGENCY COMMS; FOR ALL, VIA OPEN WIRELESS INTERNET***

INNOVATION: WIRELESS

Mobile BroadBand : The Future is Here

***“The future of Broadband is Wireless;
The future of Wireless is Broadband” ...peI***

***“Broadband Wireless will soon close what
information gap remains” ...Forbes***

***“Most exciting new tech platform since the
Internet – no innovation limits” ...Forbes***

***“Likely offer a larger wave of investment
opportunity than the PC” ...John Doerr, VC***

CMUSV INNOVATION for PEOPLE: INCIDENT AIDE SYSTEM (IAS)



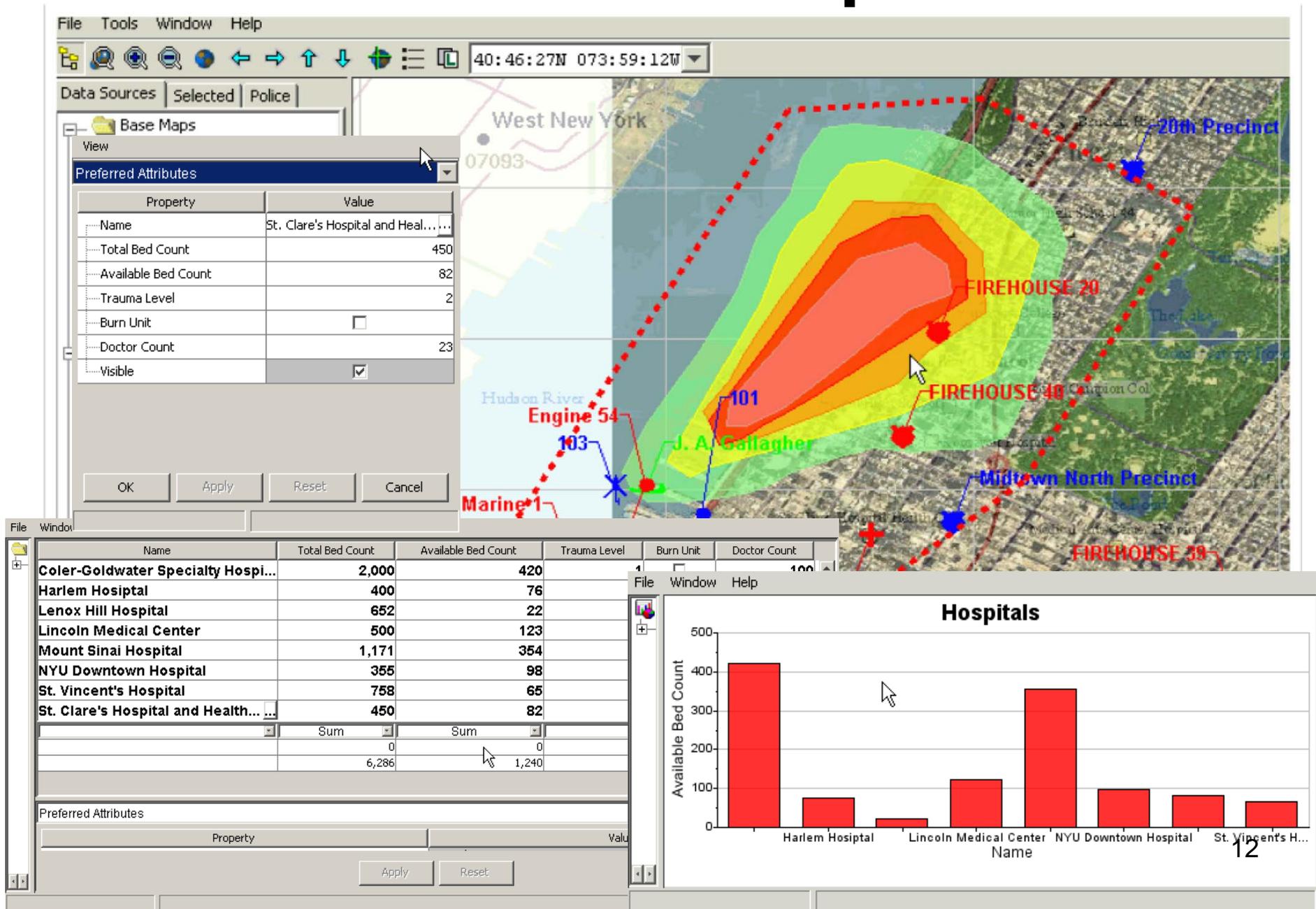
11/20/2014

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INNOVATION : SOCIAL MEDIA and UDOP/COP via OPEN INTERNET

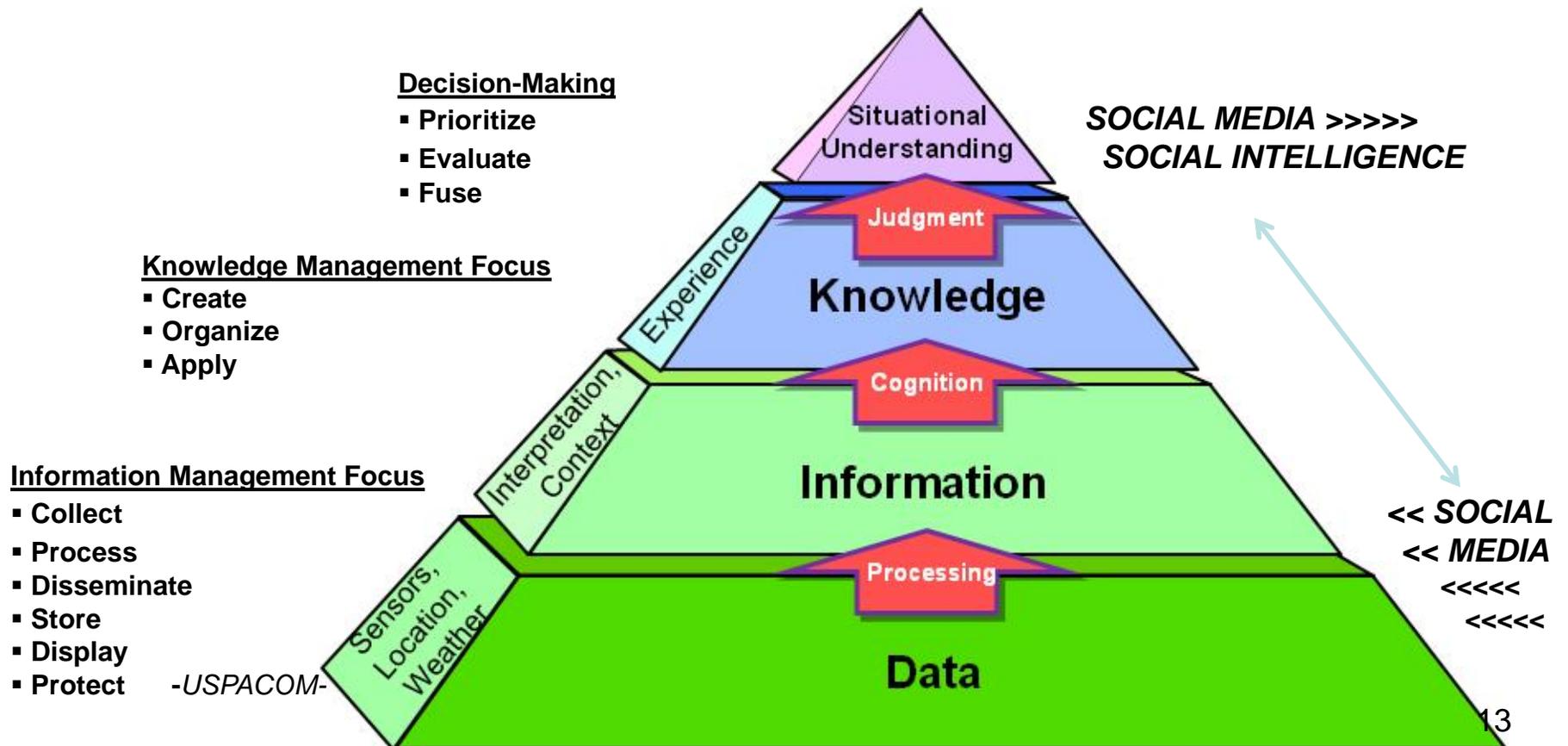
- **Enlightened Social Media use/analysis leads to “Social Intelligence” (SI) & “Situational Understanding” (SA-SU)**
- **Common (User-Defined) Operational Picture (UDOP or COP) creates shared space, = Best Decisions**
- **Shared appropriately via Open Internet**

UDOP: User-Defined Ops Picture



INNOVATION: BEYOND AWARENESS

- Strategic: From Awareness to Situational Understanding
- Tactical Process: From Social Media to Social Intelligence

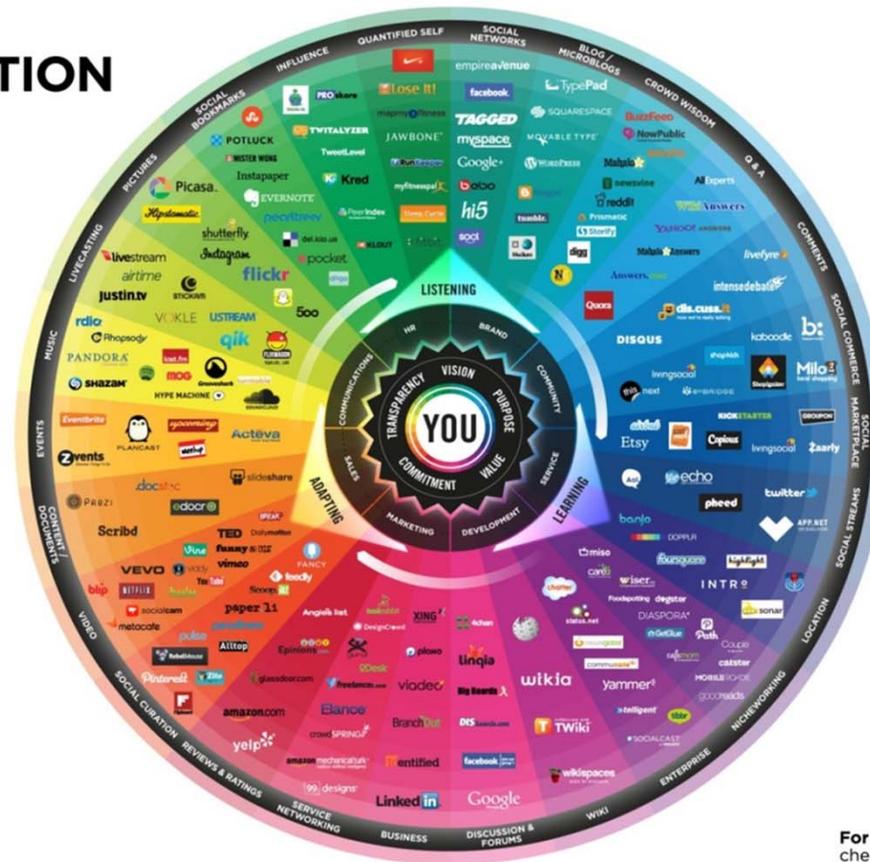


SOCIAL MEDIA: BIG CHANGE

Just 10 years, engaging all, via Open Internet

THE CONVERSATION PRISM

Brought to you by
Brian Solis & JESS3

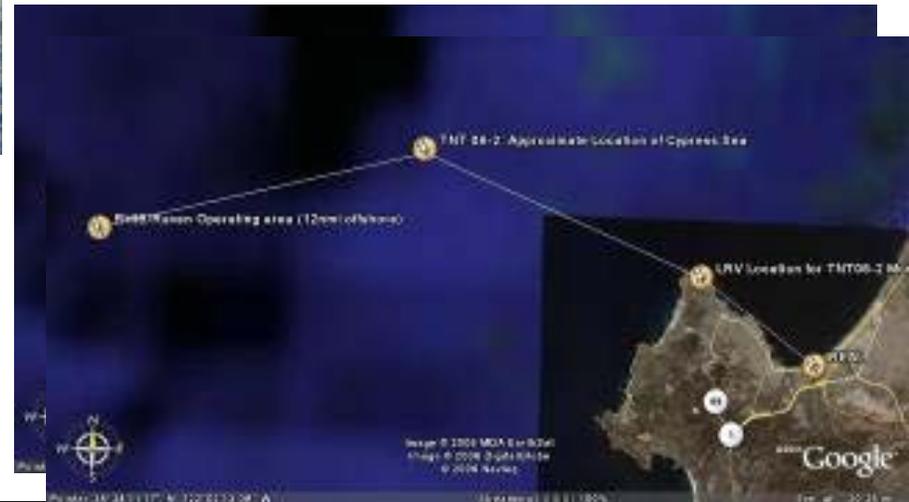


For more information
check out conversationprism.com



INNOVATION: UNMANNED SYSTEMS

MIONet: Drive-by Search by USV Sea Fox, and USV and UAV Wireless Relay



COLLABORATION

“Stars Aligning” IN ASIA/PACIFIC = Globally Unique

MCIP

- Multinational Communications Interoperability Program (MCIP) PACIFIC ENDEAVOR; 23 Countries, UN, NGOs
- NEPAL: US & Nepal Mil, Tribuvan U., CMUSV, CAN, etc.

APEC

- ASIA PACIFIC ECONOMIC COLLABORATION
- “WHOLE OF SOCIETY APPROACH” 11/11/11

MORE

- Build from best practices of MCIP, UNWGET, UNETC, PTC, CPUC, CalOES, others

“WHOLE OF SOCIETY” APPROACH via APEC

- **Asia Pacific Economic Collaboration**
- **11/11/2011: Signed “Statement Of Intent” To “Strengthen Regional Disaster Risk Reduction & Resilience” via a “Whole of Society” Approach**

APEC (con't)

- **“WHOLE OF SOCIETY” Approach to:**
 - 1. Save Lives,**
 - 2. Ensure Economic Vitality, &**
 - 3. Enhance Human Well-Being”**

U.S. President Obama, Sect. Clinton, USAID, USPACOM, US Chamber Of Commerce, NOAA, Foundations, Countries; a “Joint Policy Declaration”

MCIP, UNWGET, & PTC ECDM

- **All focused on HA/DR (Humanitarian Assistance/Disaster Relief) Communications Planning & Management with Military, Gov't, UN, NGOs, Industry, Academia**
- **MCIP: Multinational Communications Interoperability Program; 23 countries, USPACOM Joint Command**
- **UNWGET: UN Working Group on Emergency Telecomms & UNETC: Emergency Telecomms Cluster**
- **PTC ECDM: Pacific Telecommunications Council, Emergency Comms & Disaster Management Workshop**