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# **Applying the Domains of Conflict to Information Operations**

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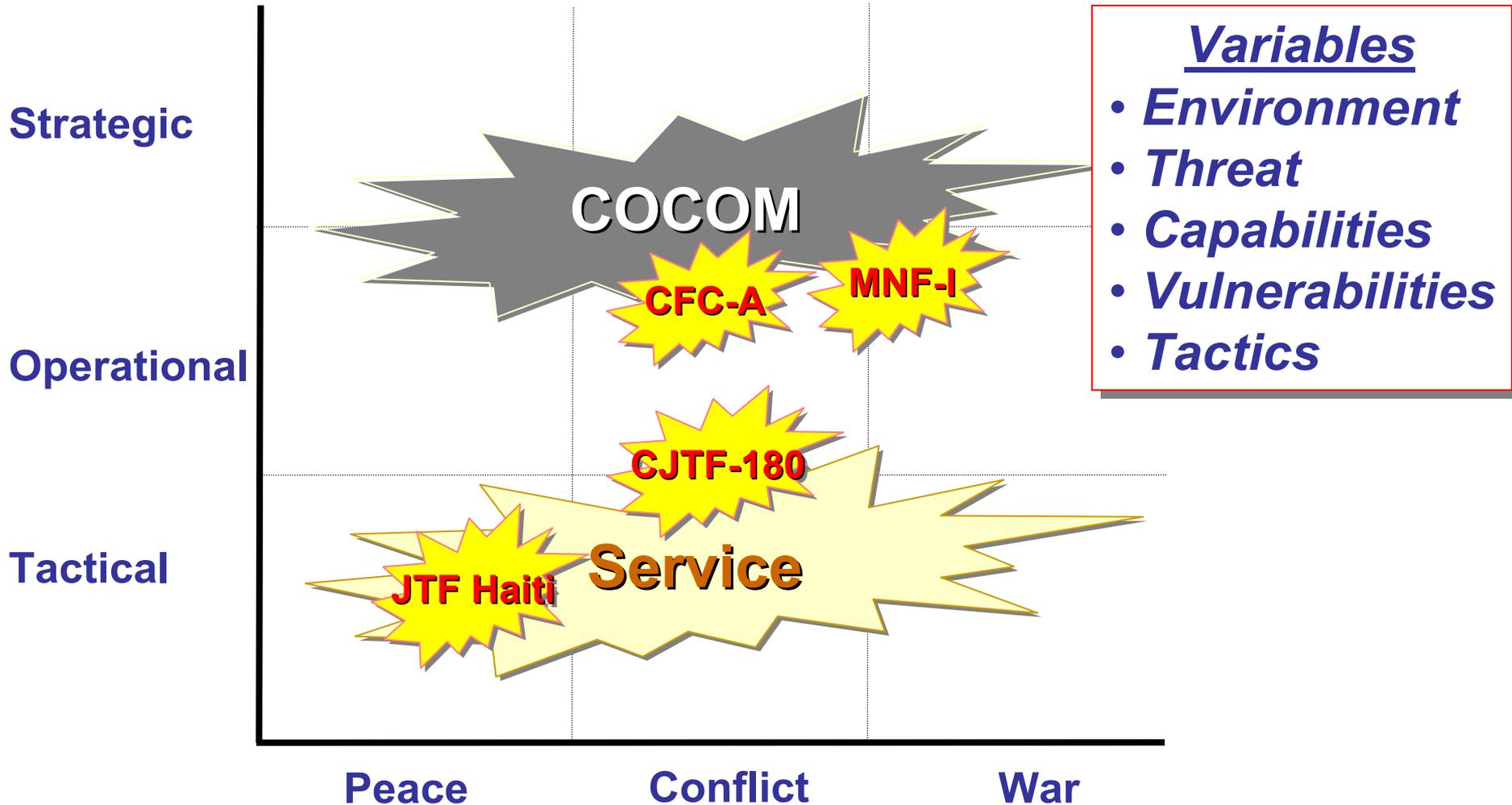
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# Situation in the Field



What is common across the spectrum?

# Three Key Definitions

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## **Information Environment (Where)**

*The aggregate of individuals, organizations, or systems that collect, process, or disseminate information; also included is the information itself.*

## **Information Superiority (Why)**

*Information superiority is the operational advantage derived from the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same.*

## **Information Operations (Who, What, and How)**

*Actions taken to affect adversary, and influence others', decision making processes, information and information systems while defending one's own information and information systems.*

**These definitions are basis for IO; however, definitions and perspectives abound**

# The Domains of Conflict

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## Three domains of conflict:

**Cognitive**

- *Abstract and intangible*
- *The mind of human beings & collective consciousness*
- *Where decisions are made*

**Information**

- *Abstract, intangible, and no physical presence*
- *Intersection or overlap of physical & cognitive domains*
- *Where information is created and exists*

**Physical**

- *The physical world - reality*
- *Land, sea, air, & space*
- *Where maneuver and combat operations take place*

## A fourth domain – cultural or social?

The domains are not exclusive to IO

# Information Environment Model

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## Domains of Conflict

## Description

## Key Attributes

### Cognitive Domain

(The Human Mind)

#### Human Consciousness

- Individual
- Collective

- Perceptions
- Beliefs
- Values

### Information Domain

(Intersection of Physical & Cognitive Domains)

#### Abstract Space based on the Two Views of Info:

- Info-as-Message
- Info-as-Medium

- Information Content
- Information Flow

### Physical Domain

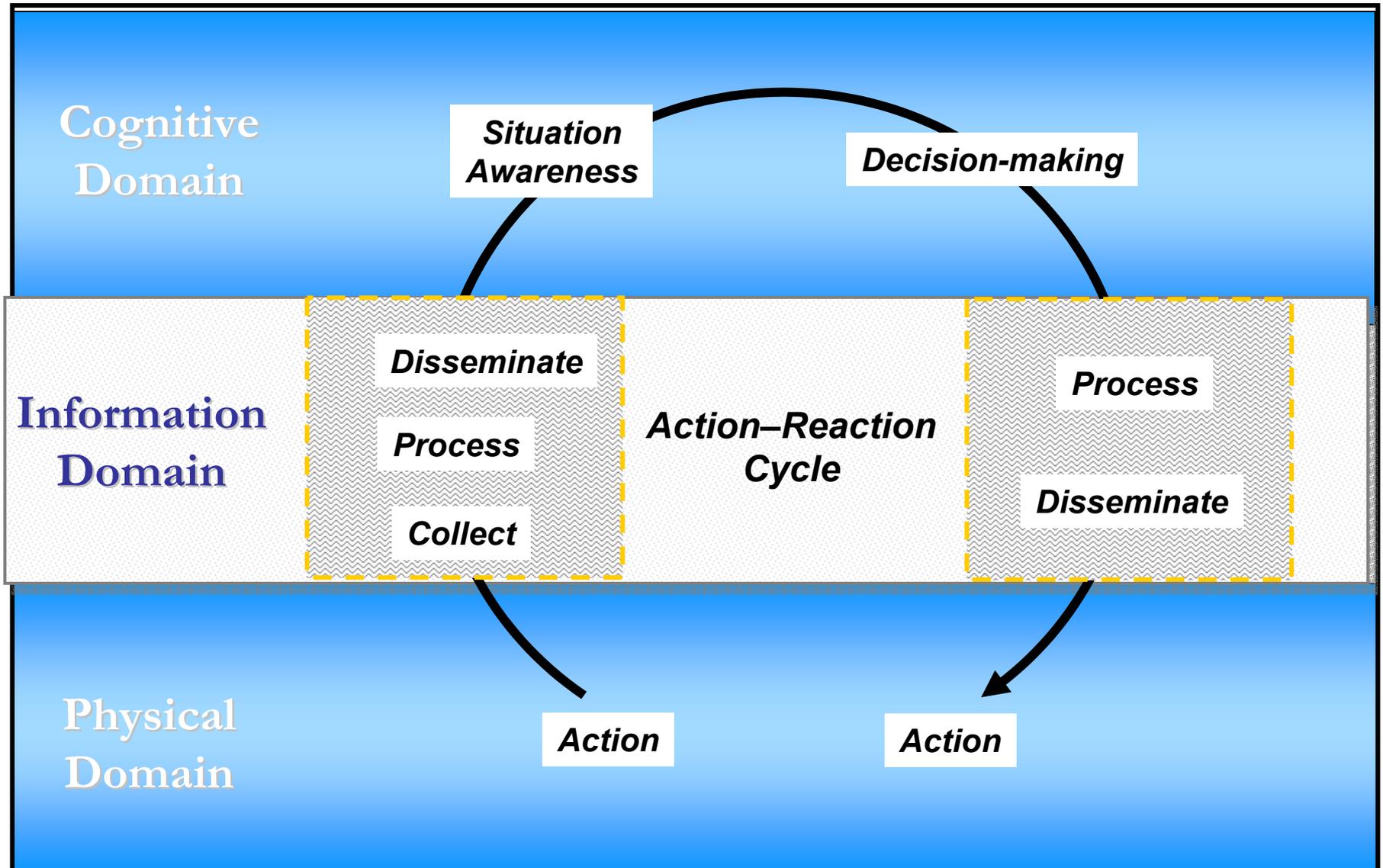
(The Real World)

#### Physical Environments

- Land
- Air
- Sea
- Space

- Information Networks
- Information Systems

# Domain Relationships



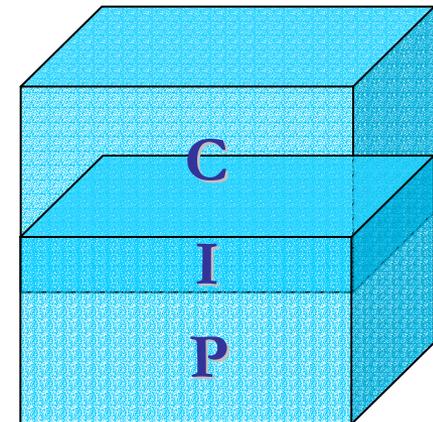
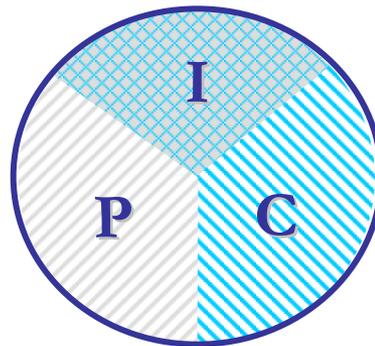
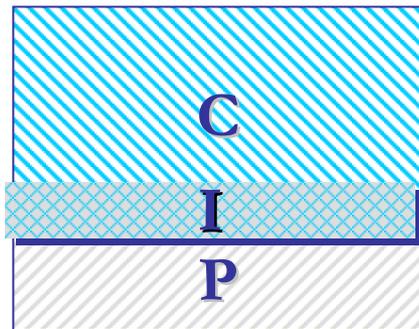
# Depiction of the Domains

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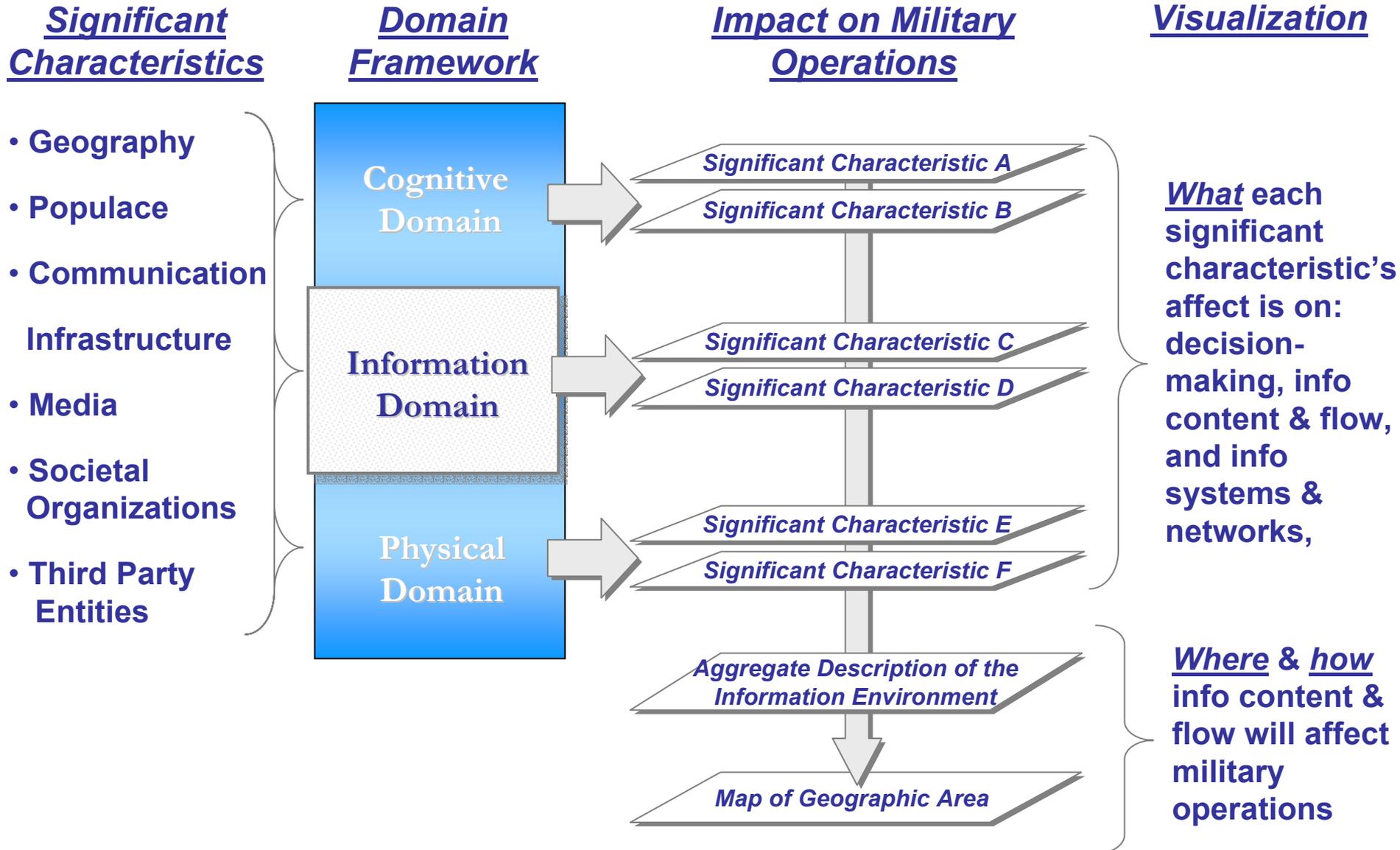
**The three domains are not:**

- **Two dimensional**
- **Co-equal geometric shapes**

**Could be visualized as:**

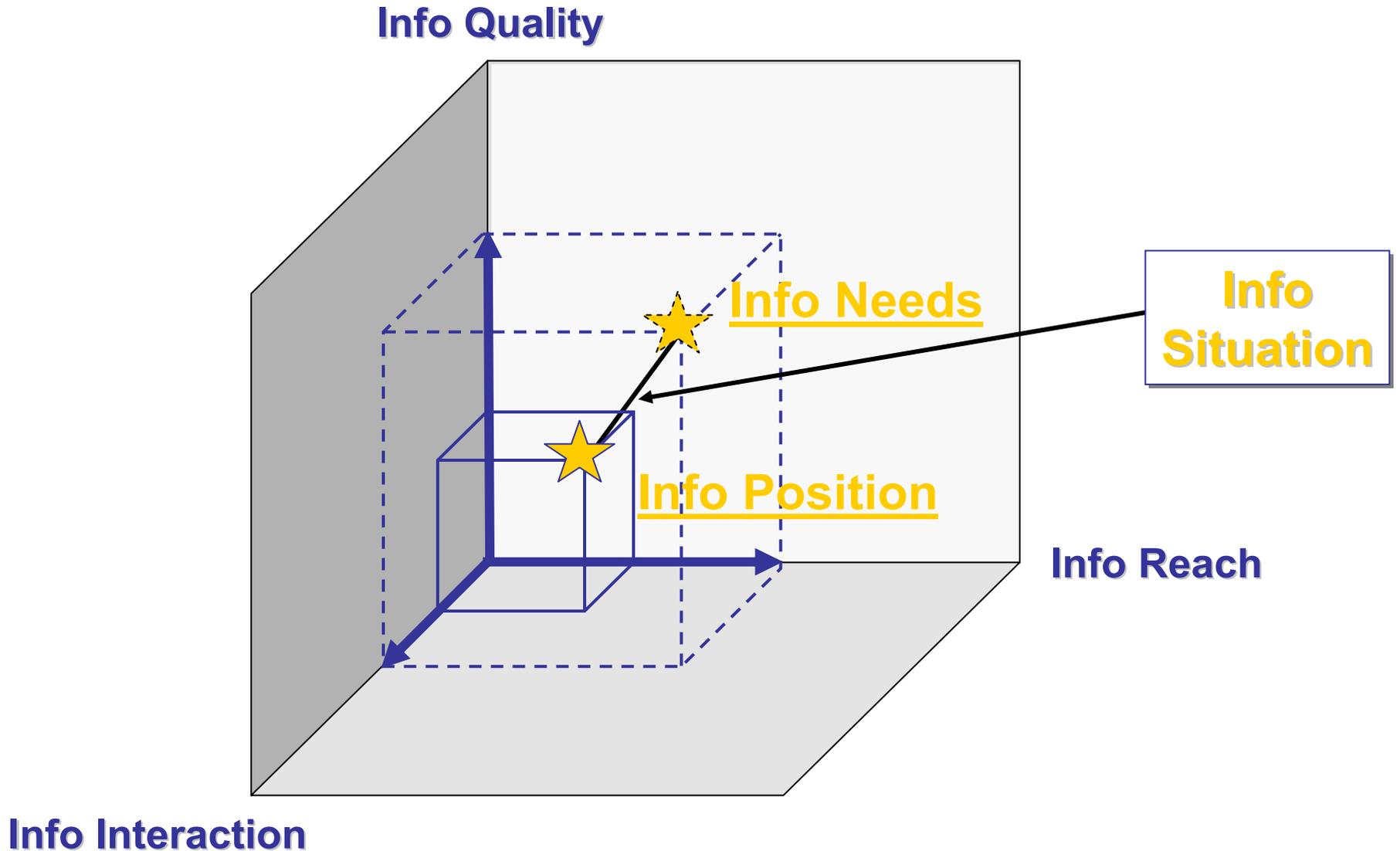


# Visualizing the Information Environment



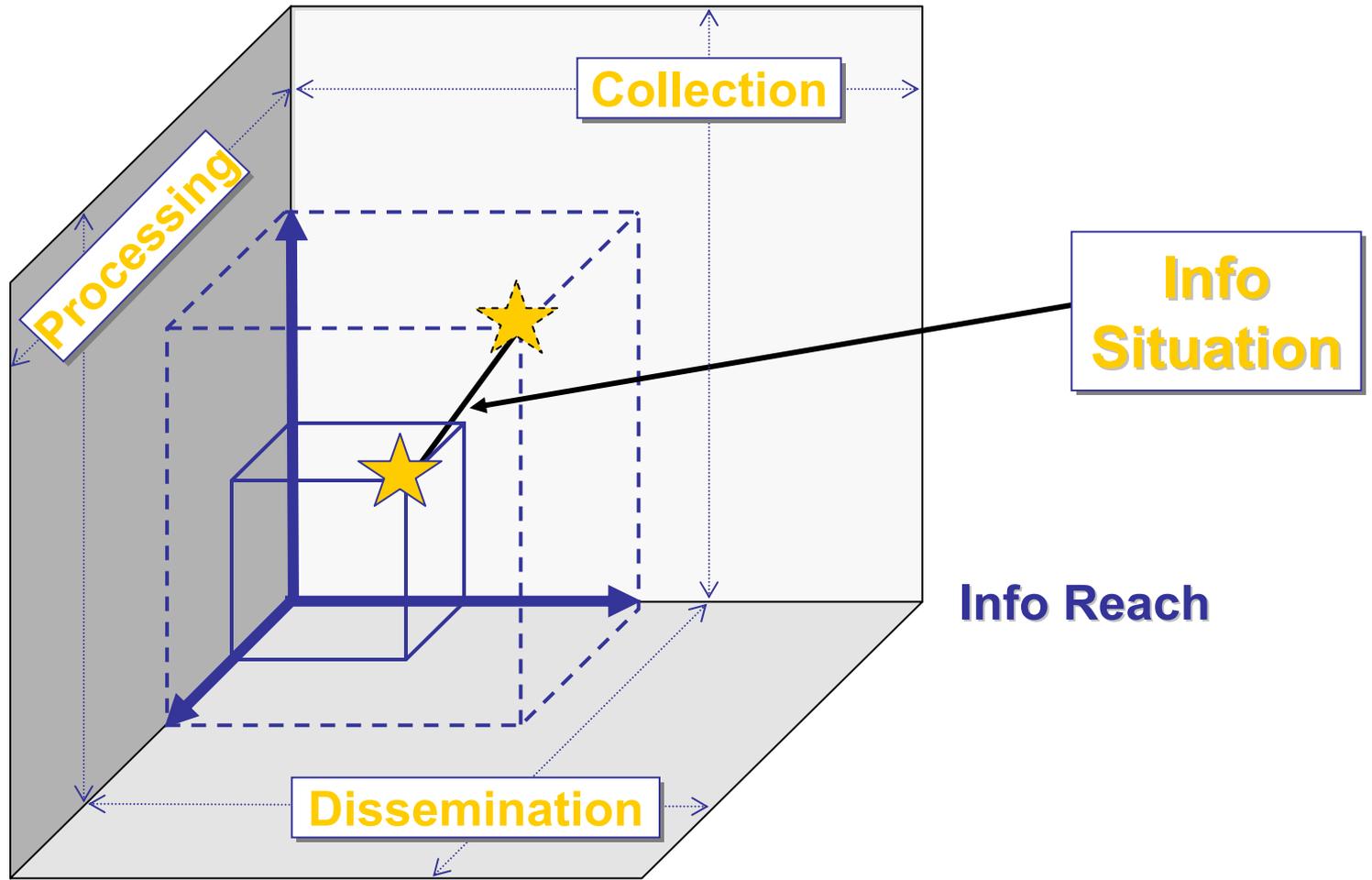
# Info Needs, Position, & Situation

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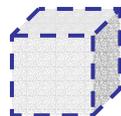


# Templating the Threat

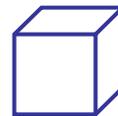
Info Quality



Info Interaction



Info Needs



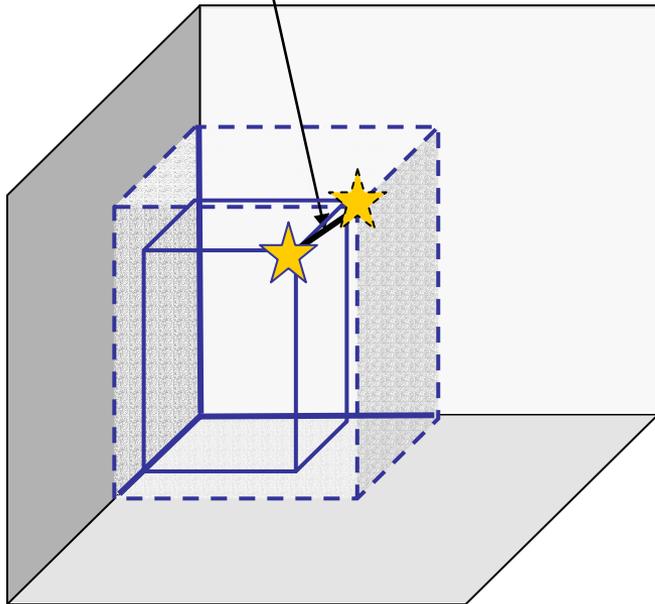
Info Position

# Information Advantage

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**Organization A**

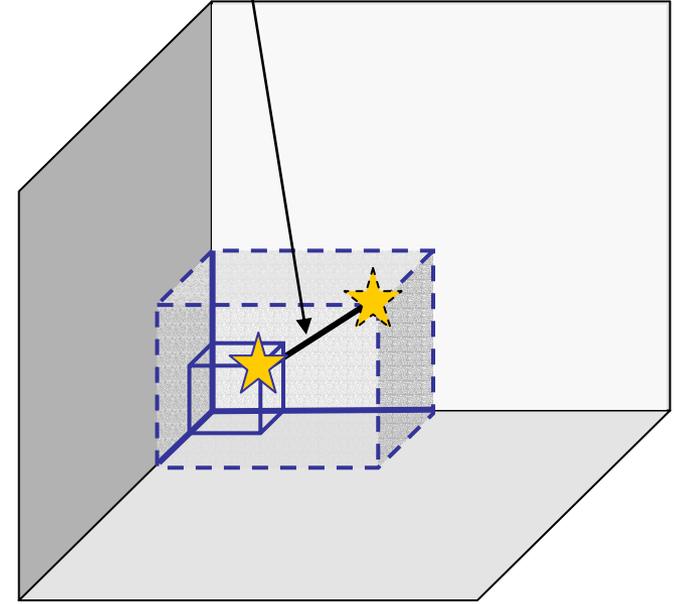
**Lesser Disparity**



**Relative  
Advantage**

**Organization B**

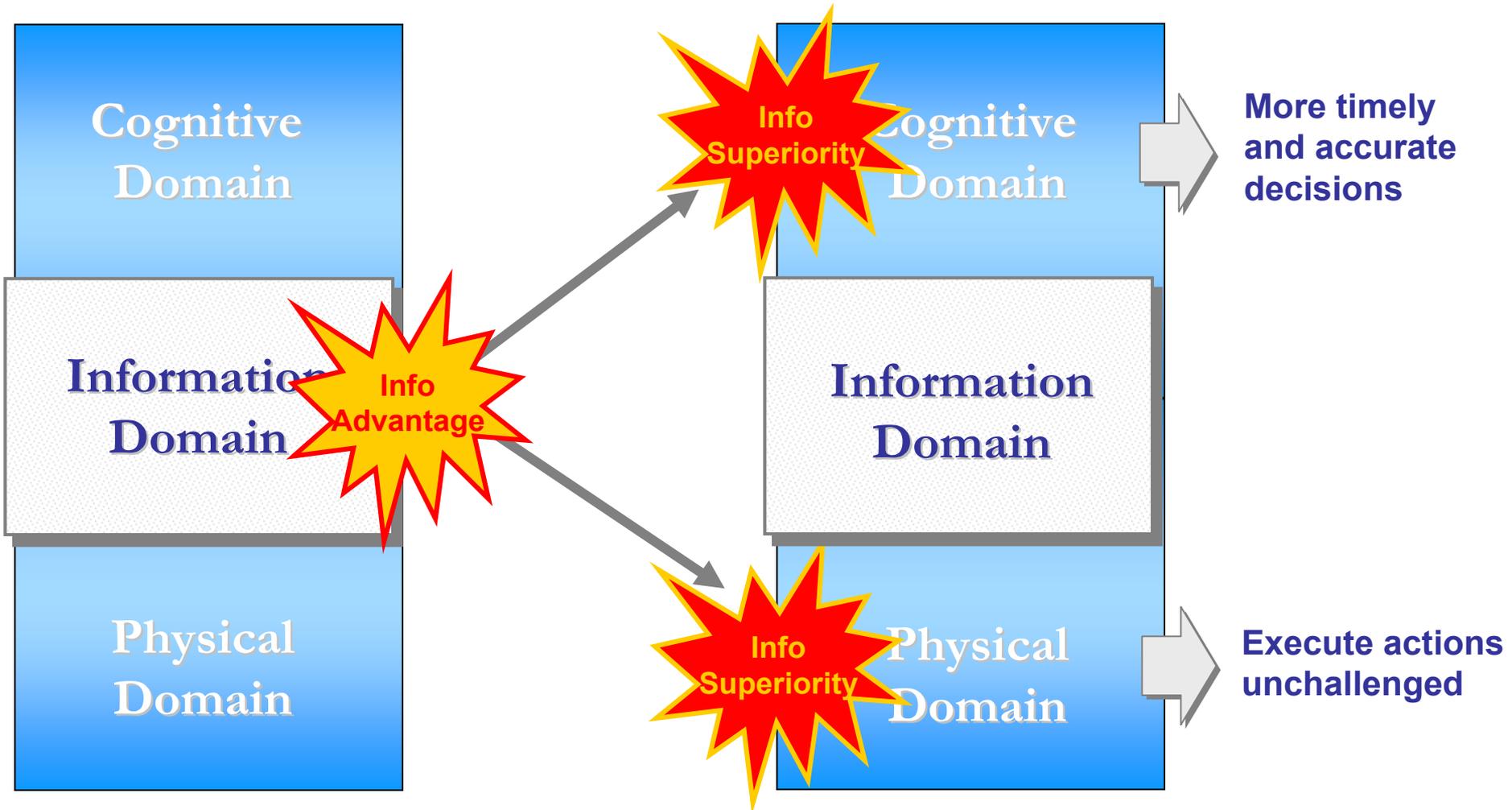
**Greater Disparity**



**Organization A has an info advantage over B**

# Information Advantage & Superiority

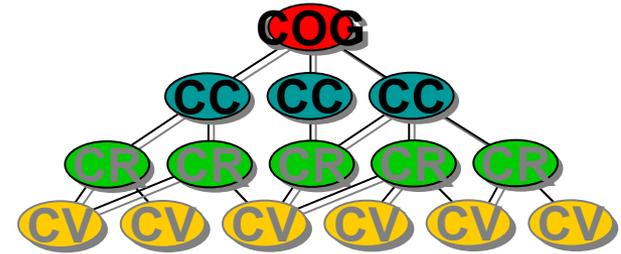
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# Future Work

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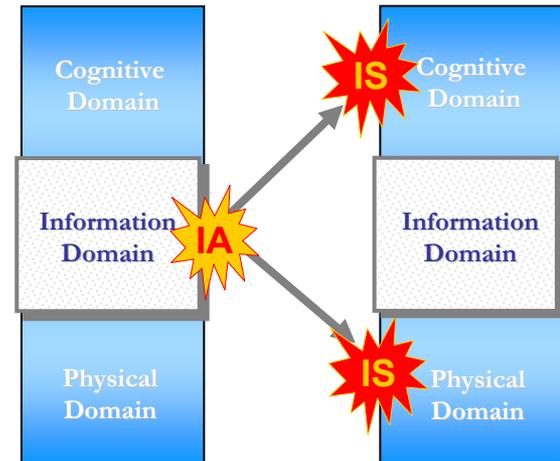
## Templating Info Needs: COG Analysis



## Objectives in the Info Domain

## Effects in Physical & Cognitive Domains

## Assessment



Plenty of work remains to be done

# Conclusions

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- **Current definitions for info environment and IO are deficient**
- **The practitioner's view:**
  - **IE: The abstract space in which information exists and flows**
  - **IO: Synchronized activities that impact the content, flow, and use of information in a particular geographic area**