

CRM

Indicador de Desempeño Grupal

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Medicina Aeroespacial

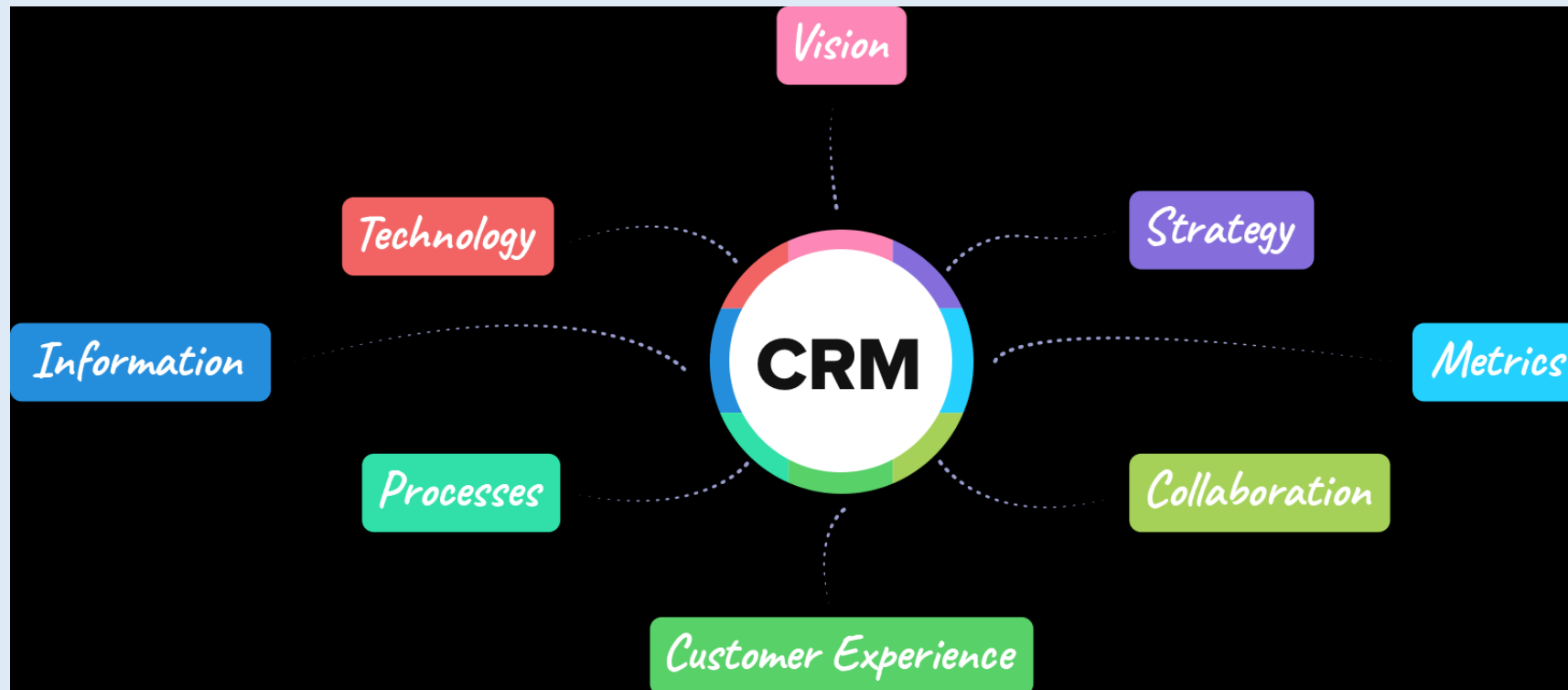
Factores Humanos

Disclaimer



CRM?

- **Customer Relationship Management**
(Gestión de Relación con el Cliente (70's))



CRM- Desempeño Humano

Cockpit Resource Management

- Concepto: NTSB UAL 173 (1978)
- Término: NASA 1979
- Entrenamiento: British Airways 1981
- 6 Generaciones:
 1. Empoderamiento y Distancia de Poder LOFT
 2. Crew Resource Management. 1986. Otros grupos. SA
 3. Entrenamiento técnico. 1990. KSA. Automation
 4. "Sistémico" 1993. AQP. Checklists. Organización.
 5. Eliminar, Capturar, Minimizar. 1996. TEM. LoA
 6. Multifactorial. 2001. TEM: DM, SA, HuPer, Workload,

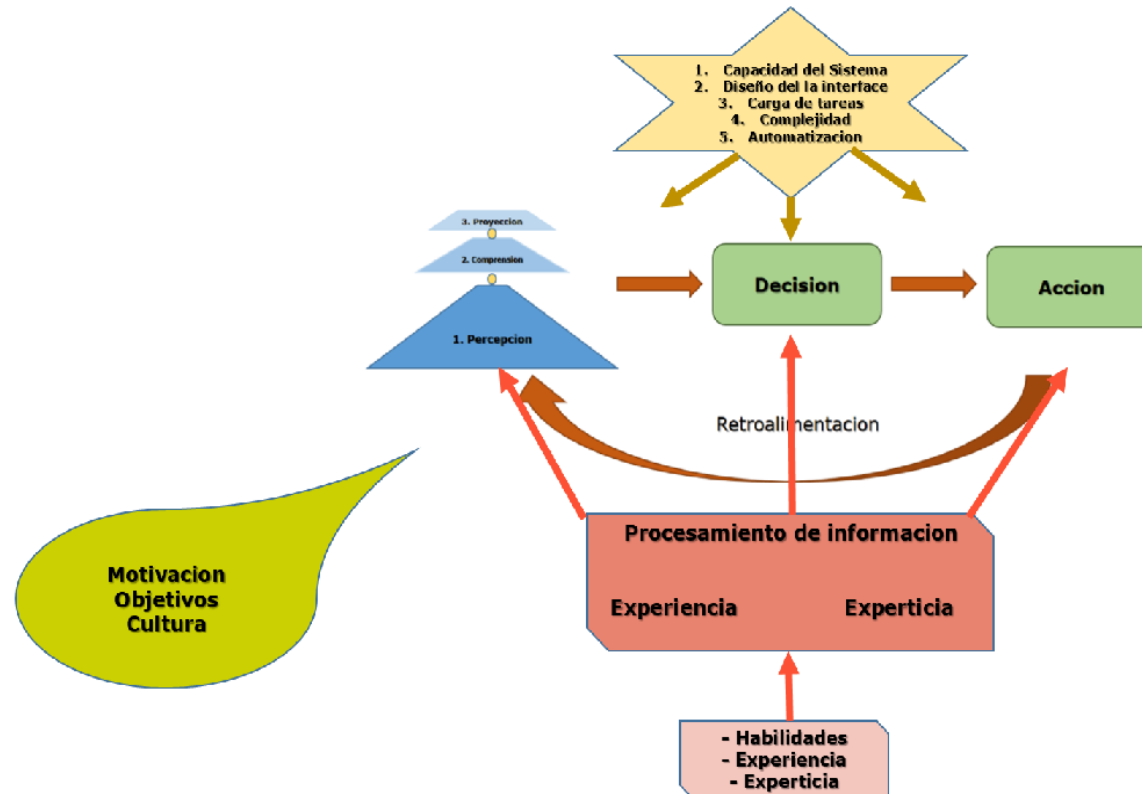
CRM

Equipo

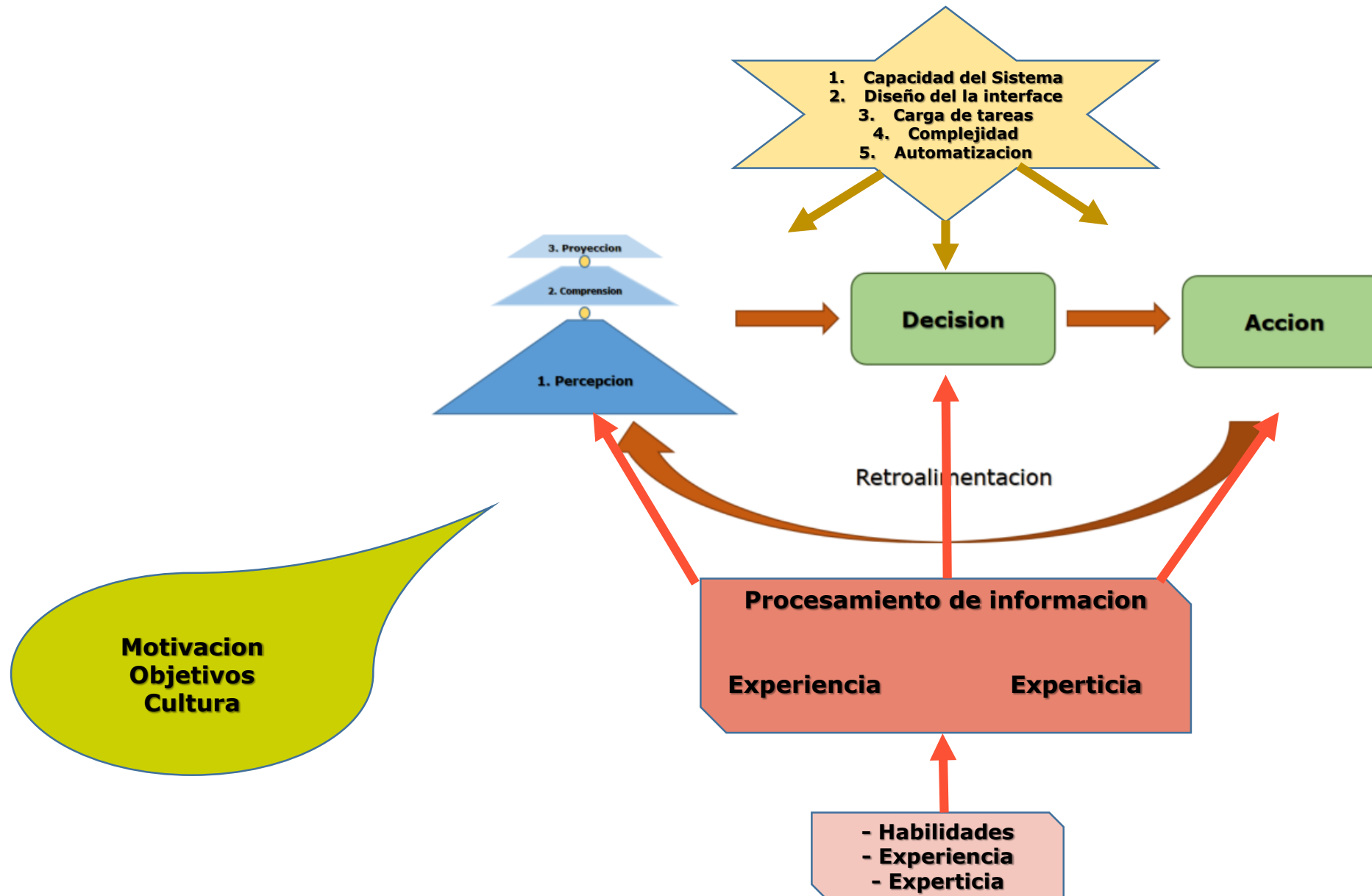
- ✓ **> 2 personas**
- ✓ **Objetivo común**
- ✓ **Interdependientes**

Conciencia Situacional

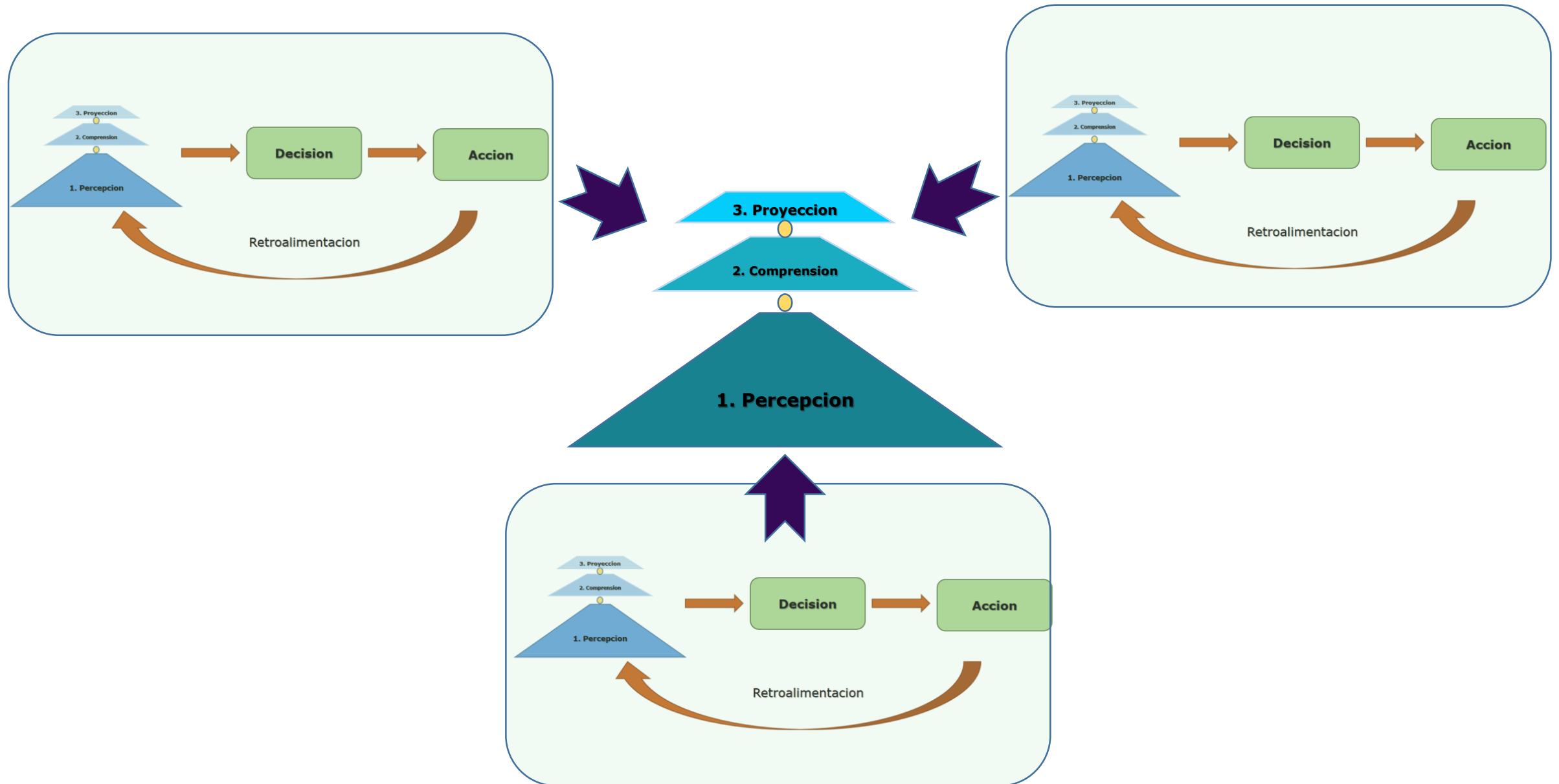
Modelo de Conciencia Situacional (Endsley)



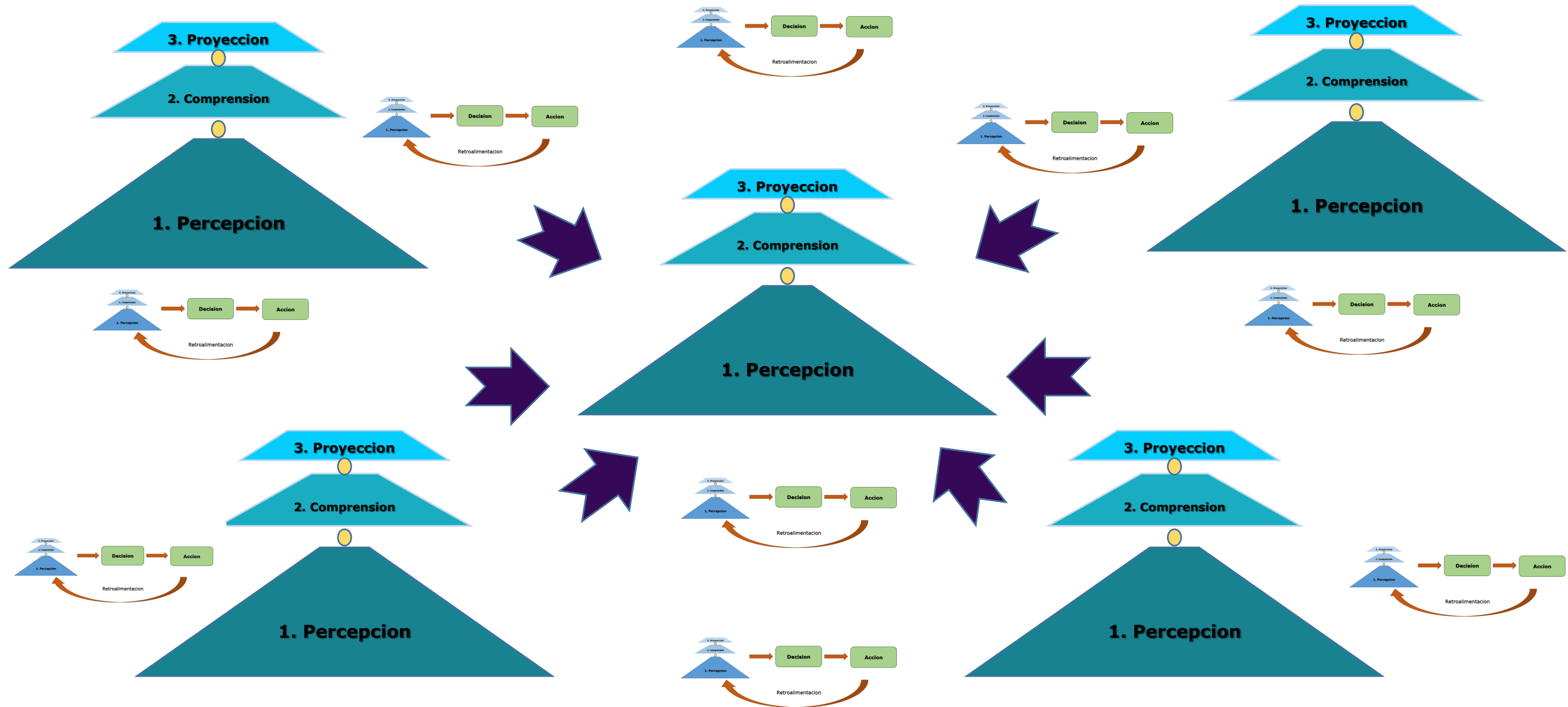
Modelo de Conciencia Situacional (Endsley)



Conciencia Situacional Grupal (SMM)

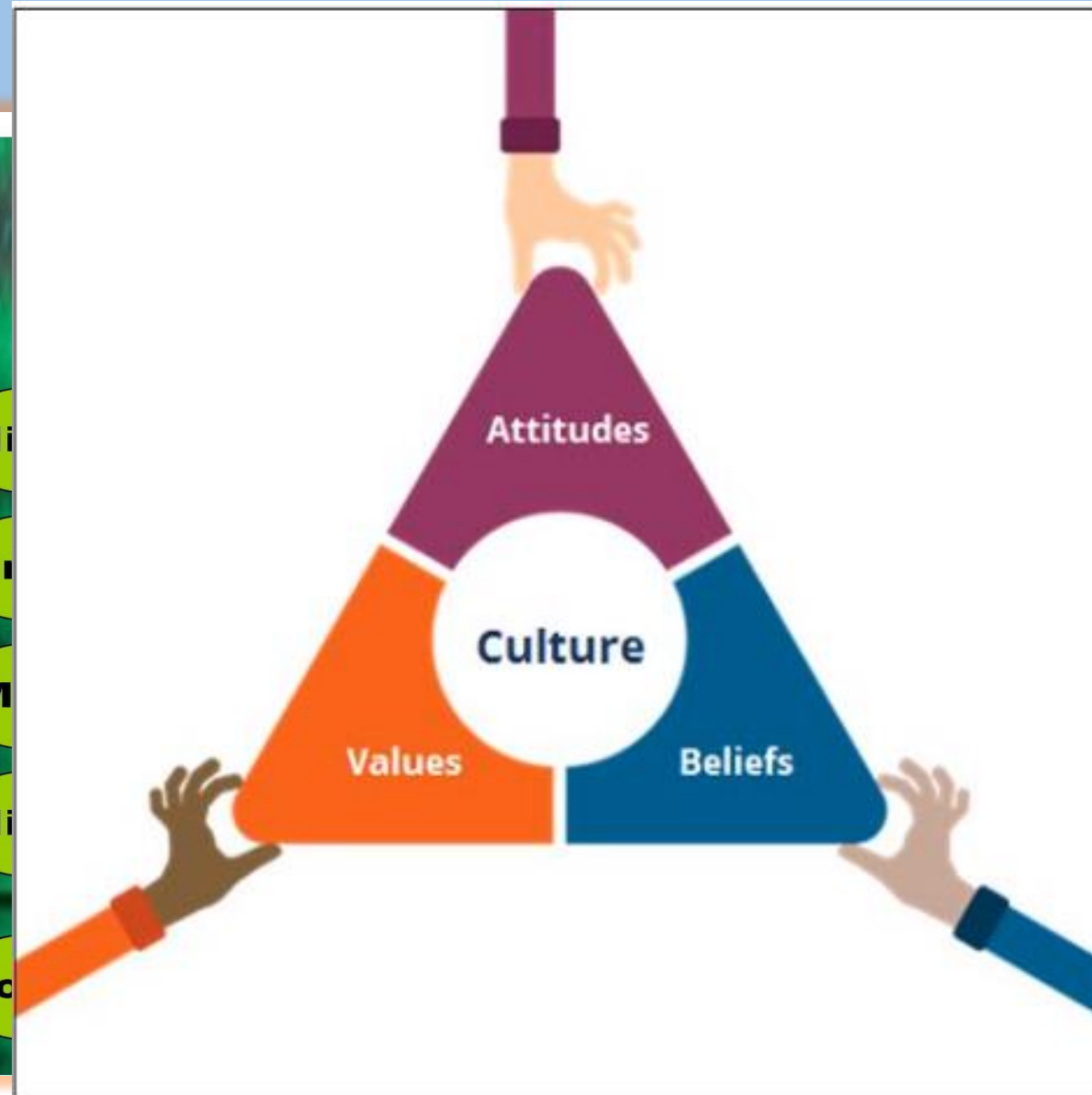


Conciencia Situacional Sistémica (STM)



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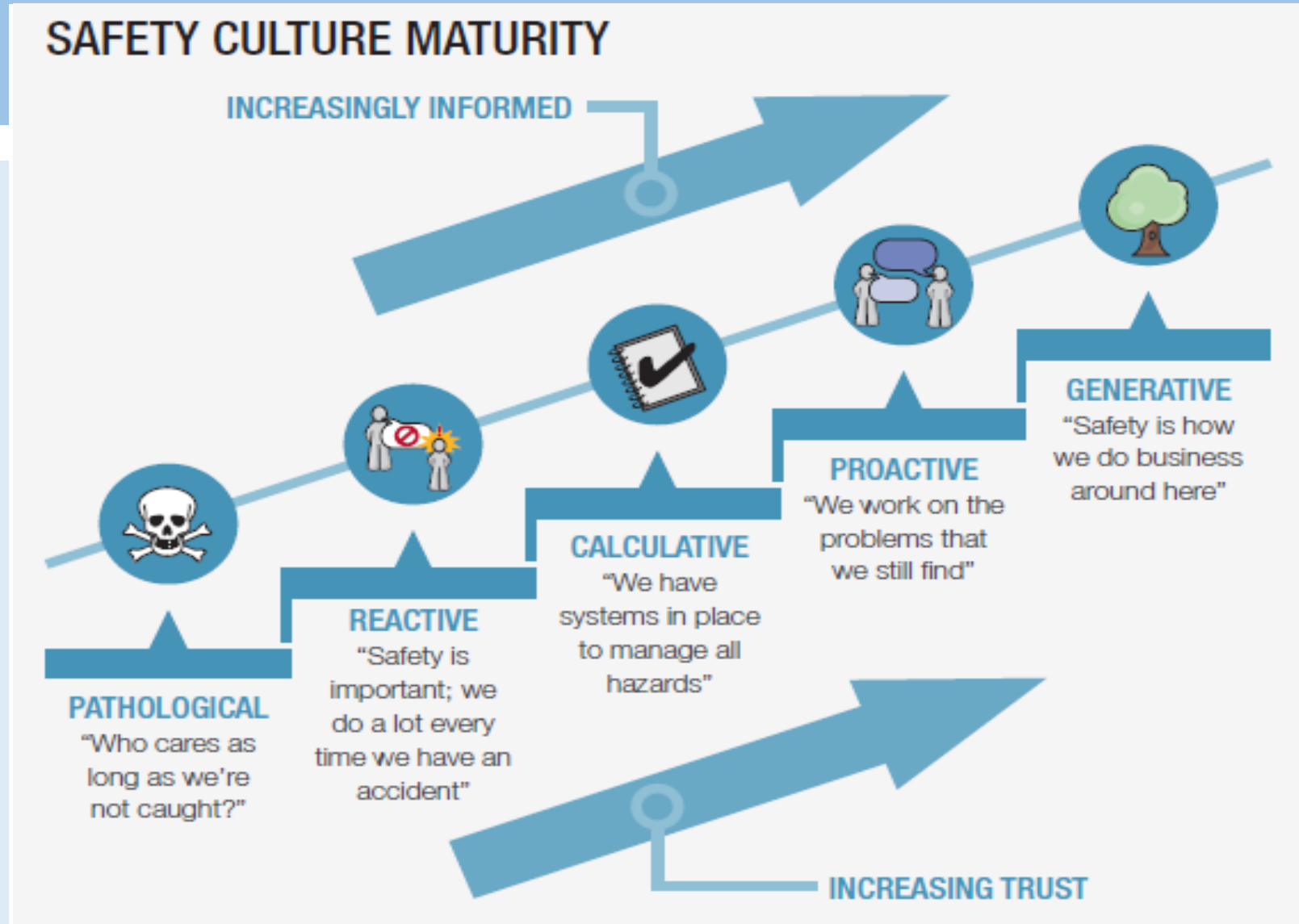
- Culture



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July 15, 2011

CRM

- Culture



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Problemas

✓ Right Stuff?

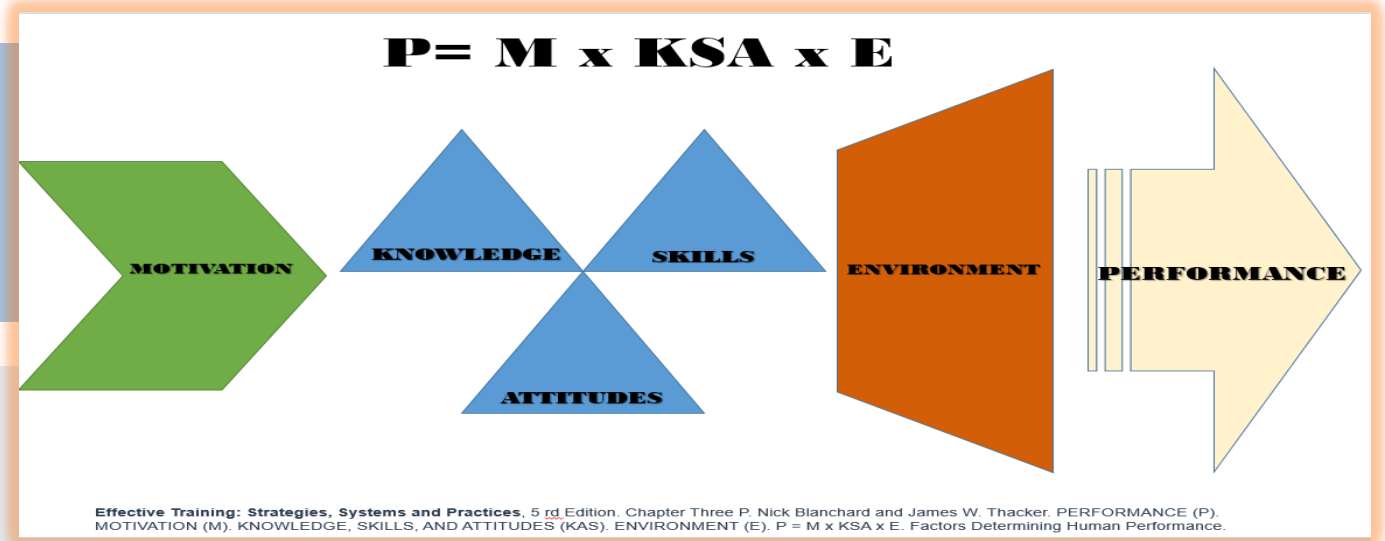
Instrumentality, Expressiveness, Motivation, Mastery

✓ Wrong Stuff?

Negat Instrumentality, Negat Expressiveness,
Verbal Aggressiveness, Interpersonal competitiveness

✓ No Stuff??

Low motivation, bad performance, no adaptation



CRM

Problemas

✓ Multitasking?

Atención: Divisa. Plástica, Elástica y Fluctuante.

✓ Automation?

LoA, Trust (Big Data, Block Chain, Deep Learning)

✓ Risk Prediction?

SMS, Predictive, HRO, Resilience

✓ Science?

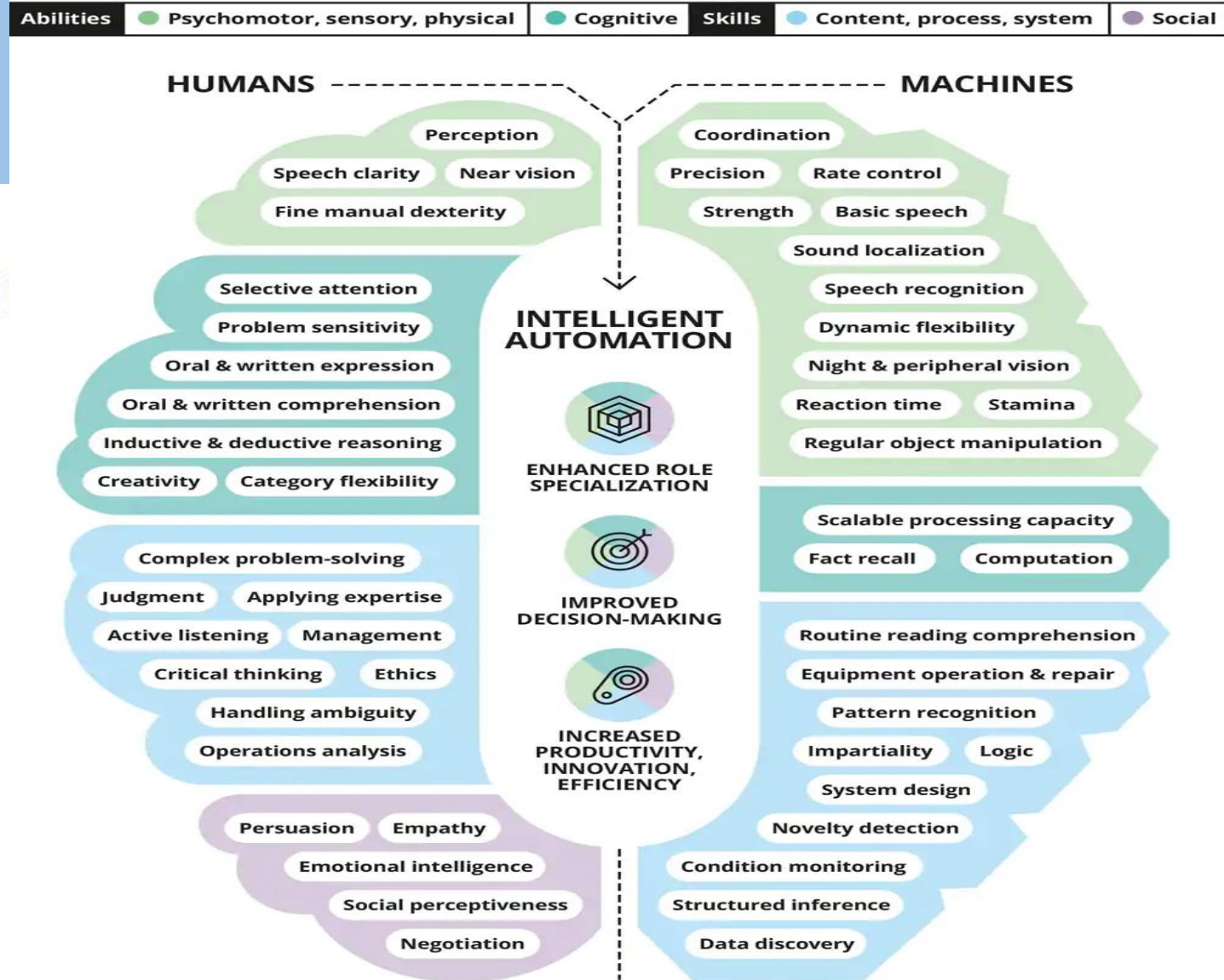
Mejor evidencia disponible, Mejores practicas recomendadas

Transferencia (signs)

CRM

Figure 1. A new mind-set for the no-collar workforce

Humans and machines can develop a symbiotic relationship, each with specialized skills and abilities, in a unified workforce that delivers multifaceted benefits to the business.



Sources: Deloitte LLP, *Talent for Survival: Essential skills for humans working in the machine age*, 2016; Deloitte LLP, *From brawn to brains: The impact of technology on jobs in the UK*, 2015; Jim Guszczka, Harvey Lewis, and Peter Evans-Greenwood, *Cognitive collaboration: Why humans and computers think better together*, Deloitte University Press, January 23, 2017; Carl Benedikt Frey and Michael A. Osborne, *The Future of Employment: How Susceptible are Jobs to Computerisation?*, University of Oxford, September 17, 2013; O*NET, US Department of Labor.

CRM-etrics

CRM-etrics

Attitudes

1. Safety Climate
2. Collective Orientation
3. Trust

Behaviors

4. Communications
5. Coordination
6. Resiliency

Cognitions

7. Team Situational Awareness
8. Problem Solving
9. Team Decision Making

Attitudes

1. Safety Climate
2. Collective orientation
3. Trust

Behaviors

1. Communications
2. Coordination & Leadership
3. Resiliency & Adaptability

Cognitions

1. Team Situational Awareness
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CRM-etrics

A. Total

A

X

B. Total

B

y

C. Total

C

Z

**CRM-etrics
score**

S

P

**Pondered
score**

P

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