SUPPA An Operational Model of Situation Awareness October 2023

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Situation Awareness Moment



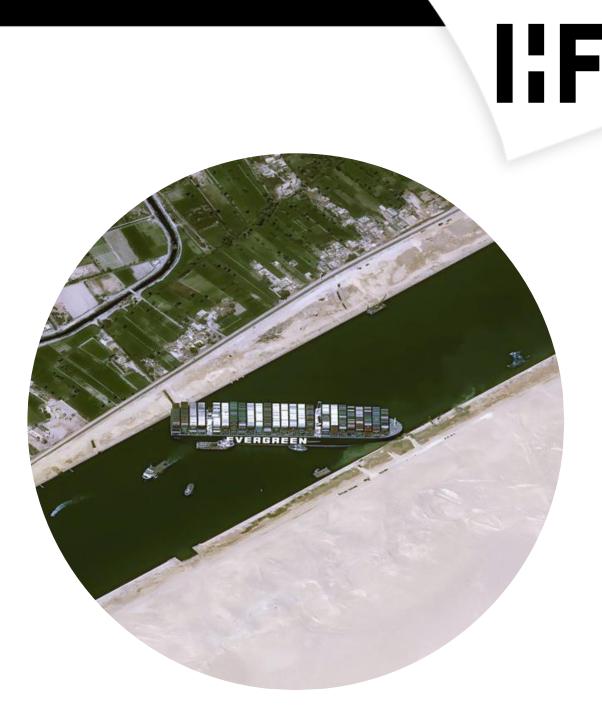
SA is a Non Technical Skill (NTS)



Background

Identifying the stage of Situation Awareness where a failure has occurred, enables us to look at the factors that influenced every step of the cognitive process.

Loss of / degraded Situational Awareness is often the main causal factor in incidents.



Request

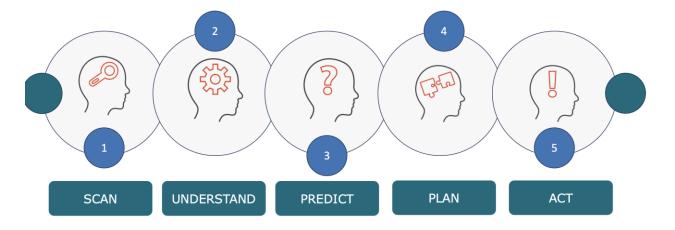


MAERSK

The Suez Canal Authority requested IHF to deliver training to its marine pilots focusing on the behaviours and performance of the human in the system.

At the centre of this approach was IHF's proprietary operational model of Situation Awareness – SUPPA[™] (Scan – Understand – Predict – Plan – Act) model.

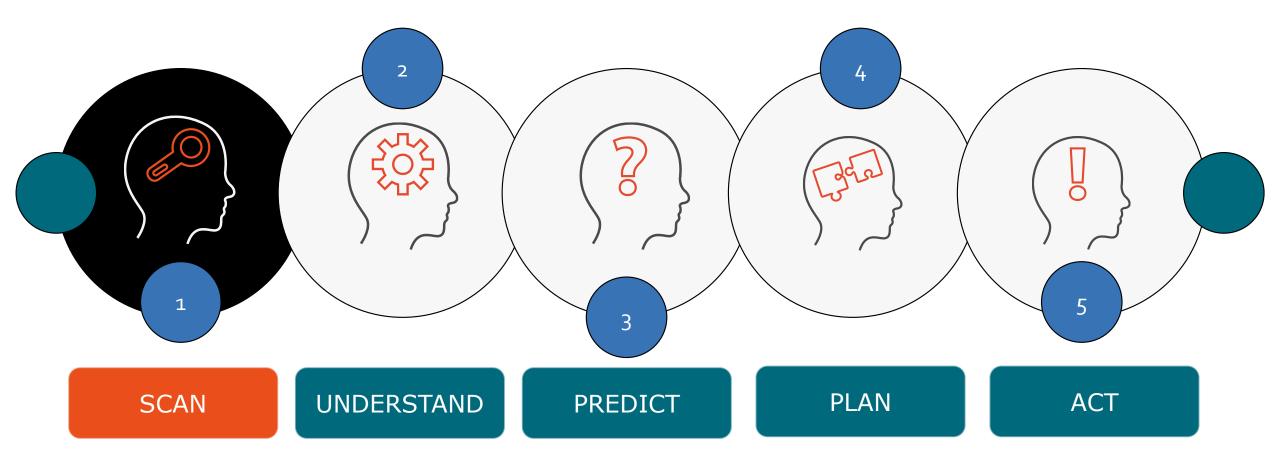
What is SUPPA™?



- SUPPA[™] is an investigative model based on Situation Awareness research that facilitates the integration of HF into incident investigation.
- IHF chose Situation Awareness as the basis for our model as research has continually highlighted that it is often the main causal factor in incidents. (Hartel et al., 1991; Endsley, 1995b; O'Dea & Flin, 1998).
- Most incident investigations identify SA failure as a contributing factor to incidents and accidents.
- SUPPA seeks to identify the specific stage of situational awareness that a failure has occurred.



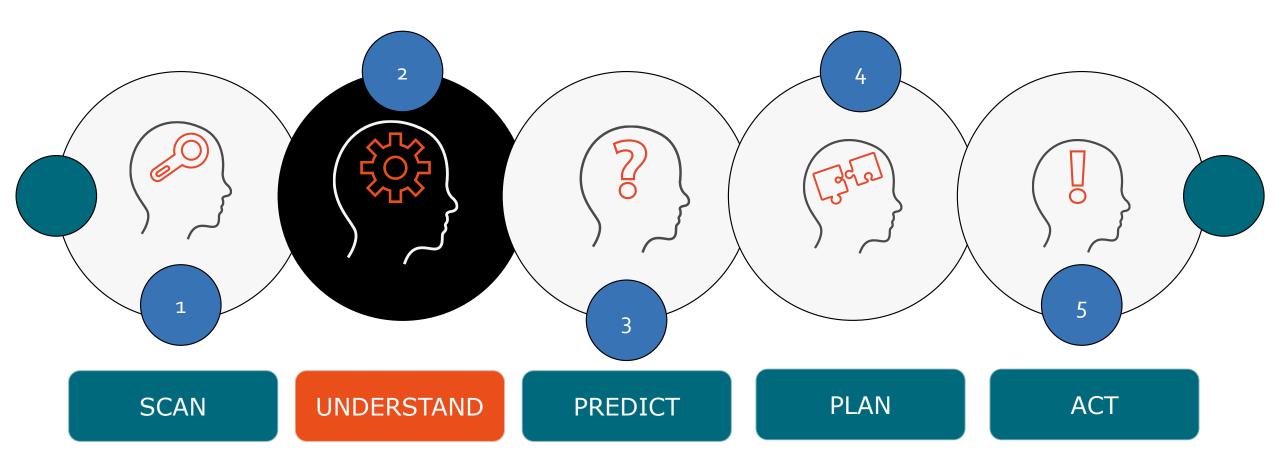
Taking information from the outside world



Understand

Interpreting and understanding the information

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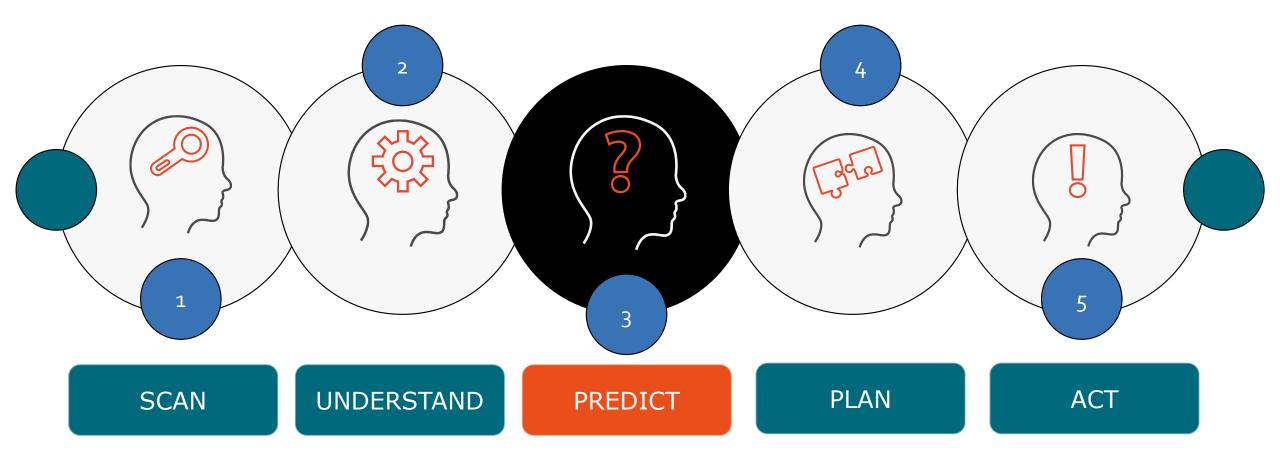




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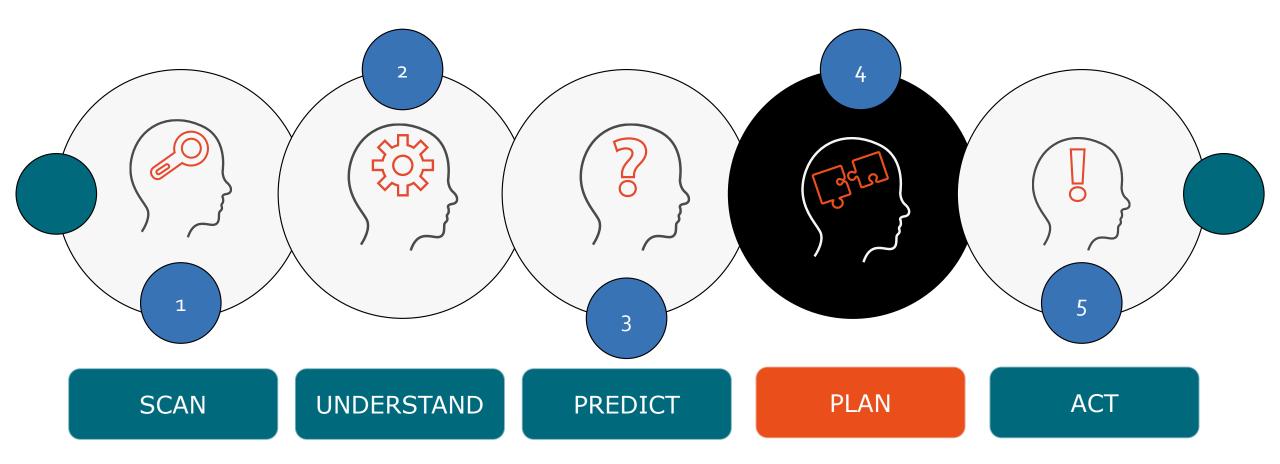
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Using this information in combination with your own knowledge



Plan

Predict and plan what happens



Plan cont.

Sometimes, we knowingly and willingly undertake a **"Planned Deviation".** You may know this as a **"Violation".**

The UK HSE describe violations as 'deliberate deviations from rules, procedures, instructions and regulations'.

• ROUTINE GAINS

o Routine Gains can influence individuals' so that they slowly drift from the prescribed way of doing things and new accepted methods are established (work as-done). There might be a variety of gains for the individual in the new method of work such as improved efficiency, quality or prioritisation.

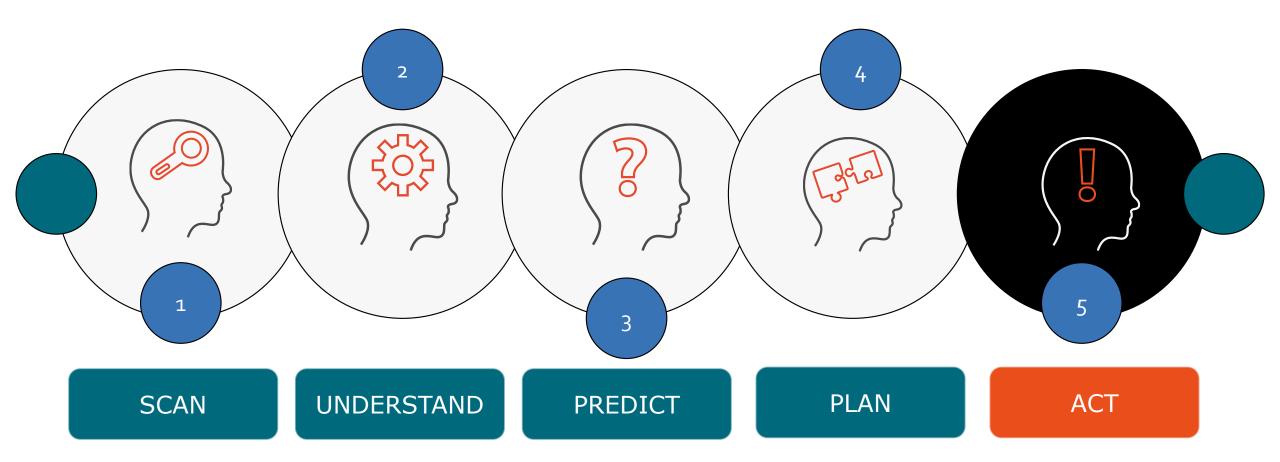
• SITUATIONAL RESILIENCE

o Situational deviations occur when individuals find themselves in a position where they feel it is necessary to deviate from the rules to get the job done successfully. These situations can include when circumstances change, the procedures are deficient, or resources are lacking.

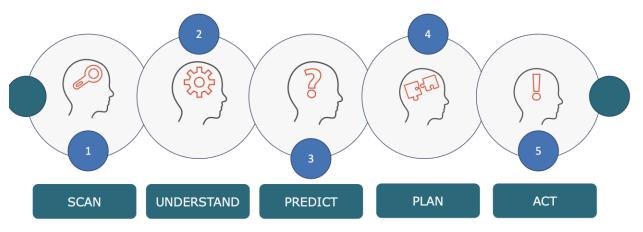
• EXCEPTIONAL EVENTS

o Exceptional events are when an unexpected and urgent event occurs that requires an individual to respond in the moment. In this case an individual may act on impulse or intuition. Act

On the basis of the previous steps



Summary



- Situation Awareness is a common cause of error/incidents and accidents
- SUPPA is our systems based rather than Human based model
- Behaviours are influenced by the system the person is working in

Questions







