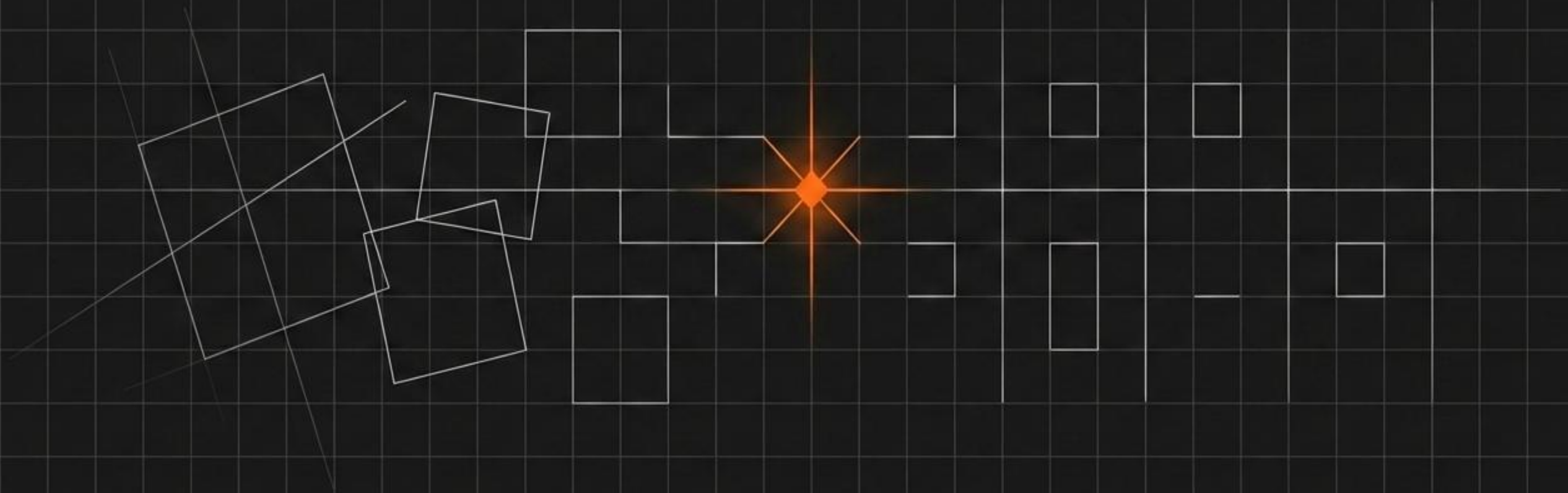


5S Methodology



By Briya Kodees

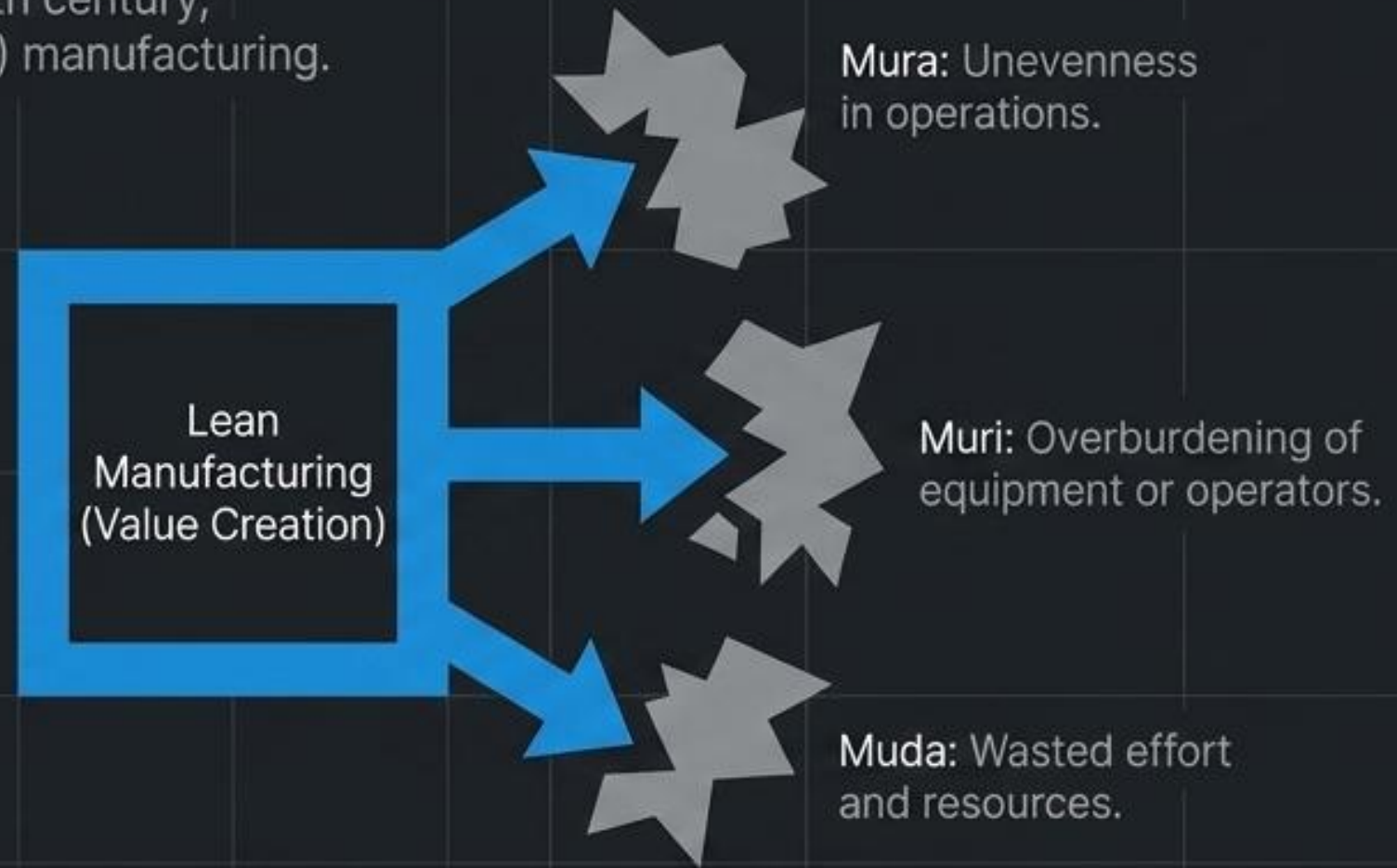
Beyond the Broom: Reframing 5S

5S is not a glorified spring cleaning exercise. It is a foundational lean manufacturing philosophy designed to expose and eliminate waste.

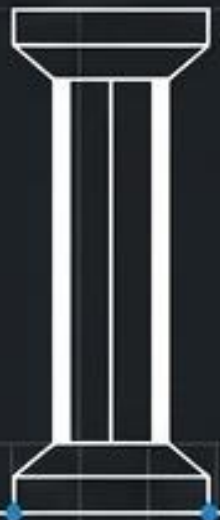
Traditional Housekeeping		The 5S System	
Aesthetic cleanliness.	Goal	Efficiency and optimal workflow.	
Occasional / Reactive.	Frequency	Continuous / Preventative.	
Removing dirt and dust.	Focus	Identifying anomalies and eliminating waste.	
Relegated to janitorial staff.	Ownership	Driven daily by everyone, from shop floor to management.	

The Toyota Foundation: Eliminating the Three M's

Developed by Toyota Motor Company leaders in the mid-20th century, 5S was engineered as a critical enabler for Just-In-Time (JIT) manufacturing.



Seiri (Sort)



Seiton (Set)



Seiso (Shine)



Seiketsu (Standardize)

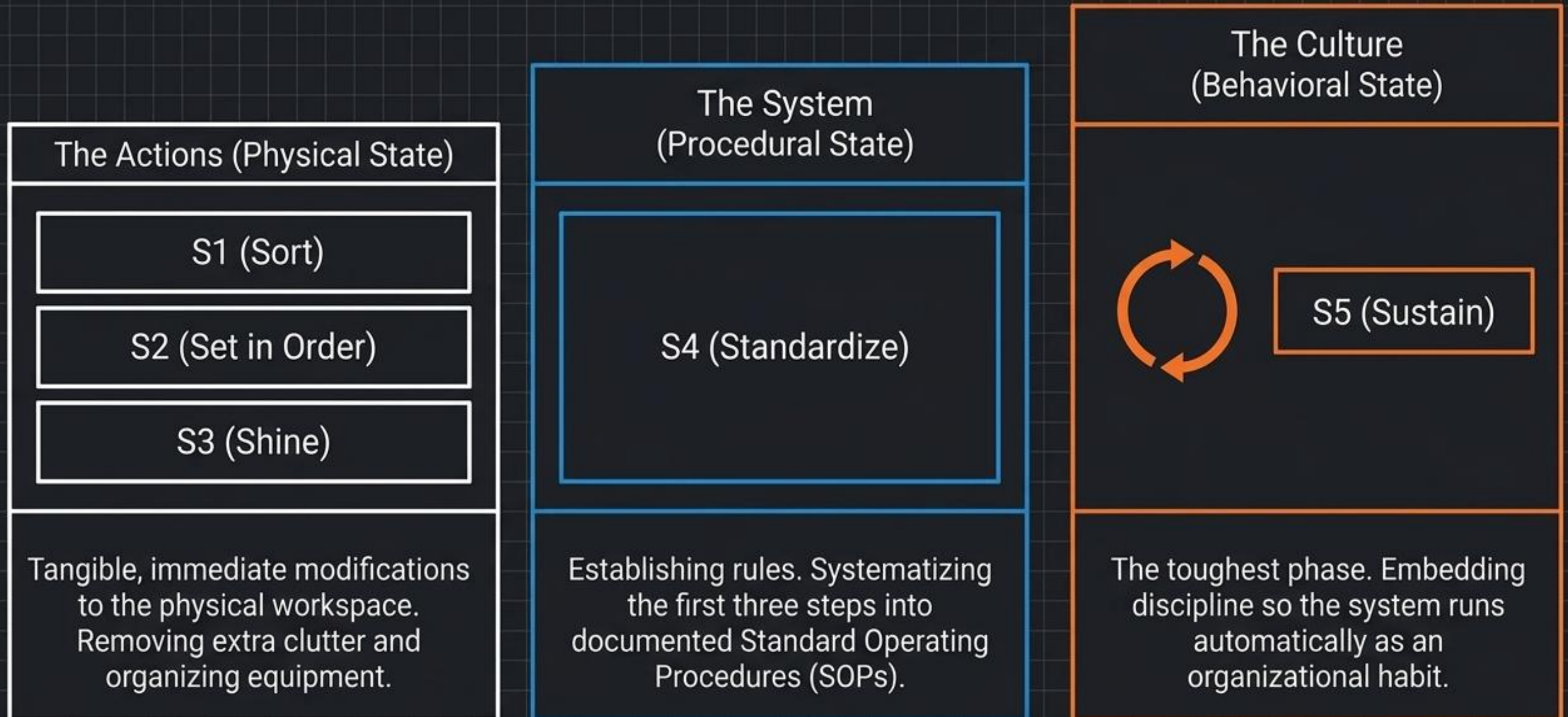


Shitsuke (Sustain)



The Action-to-Culture Framework

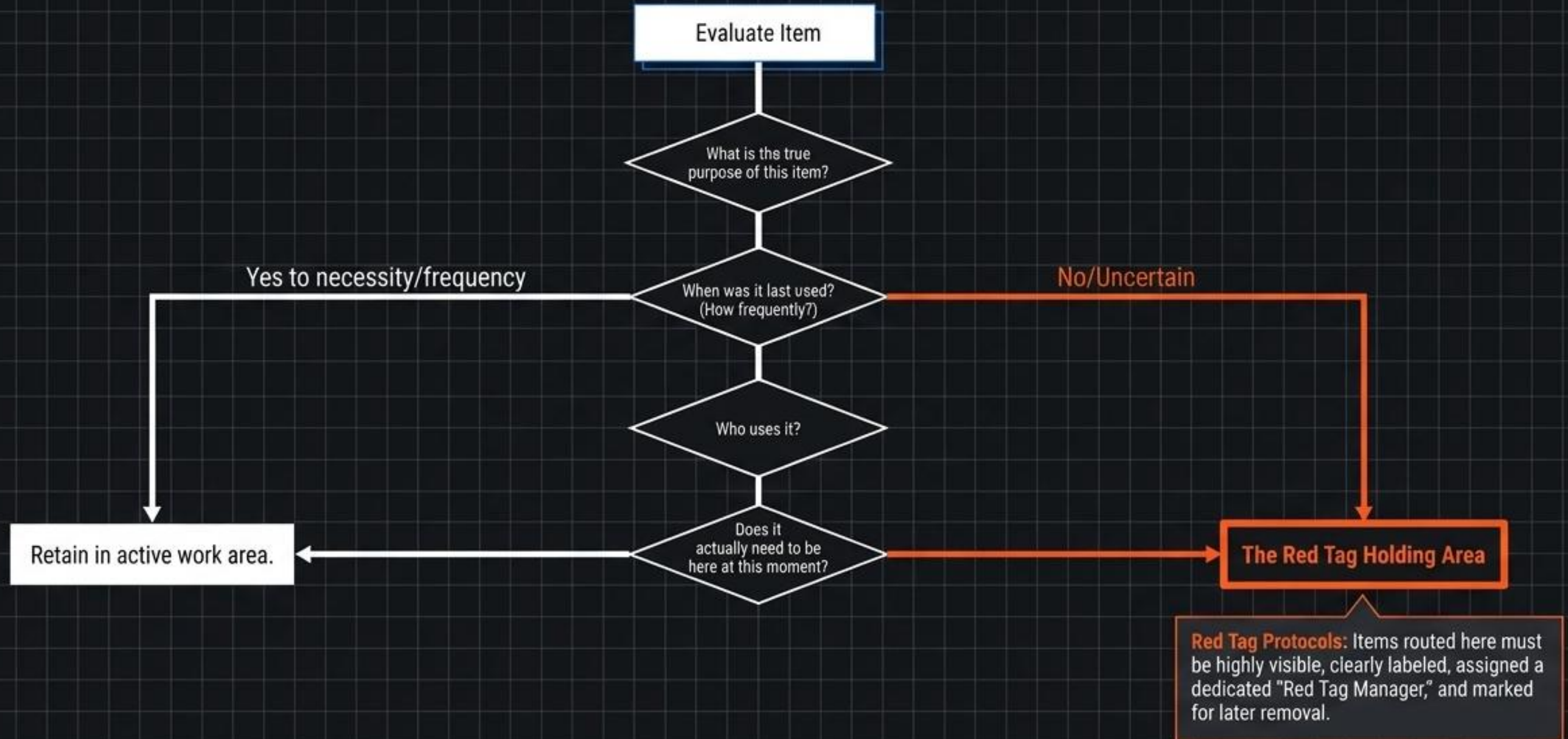
Moving from physical changes to behavioral psychology.



S1: Seiri (Sort) — The Necessity Audit

Separate the necessary from the unnecessary to optimize production flow.

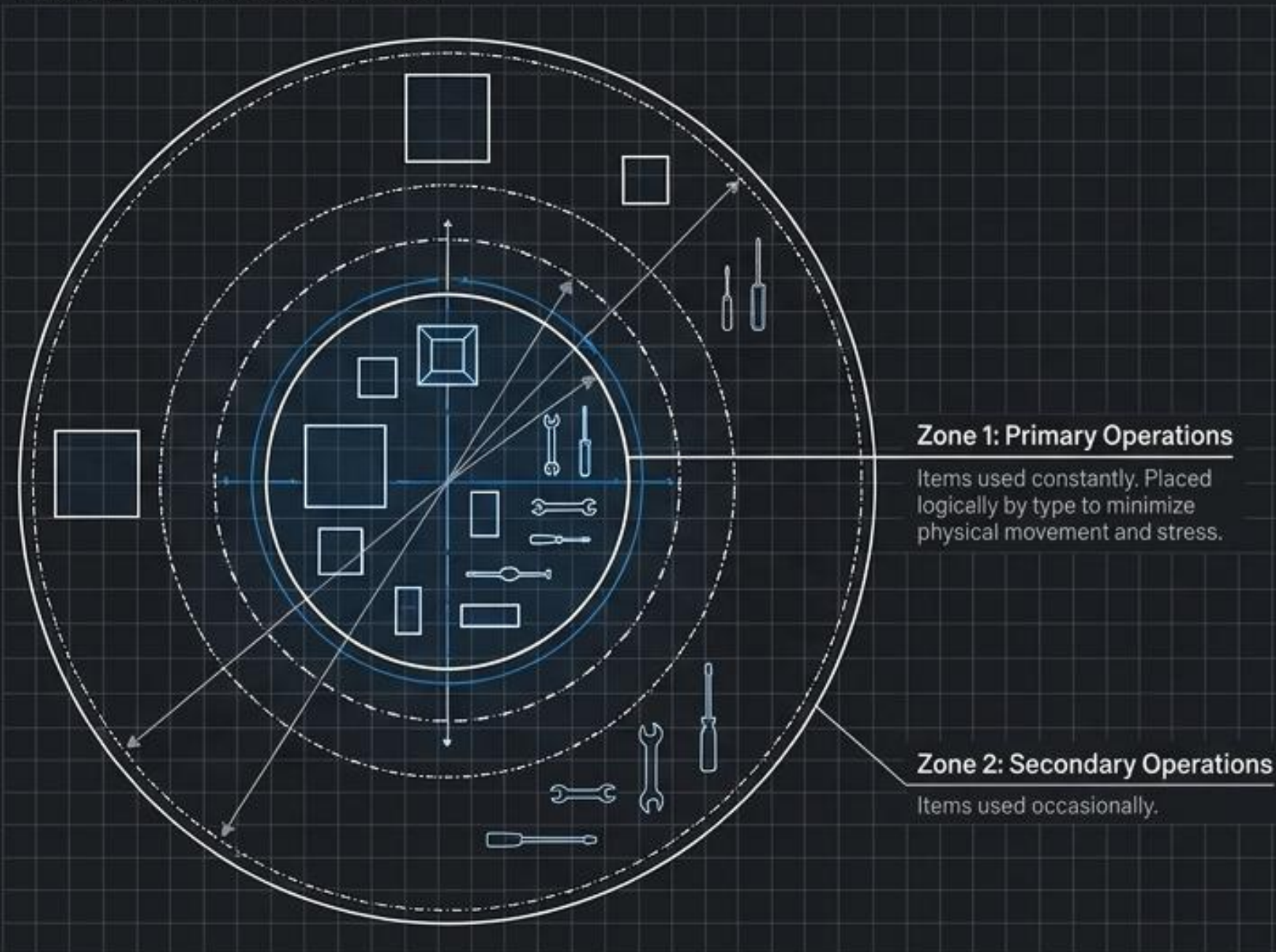
The Red Tag Decision Tree



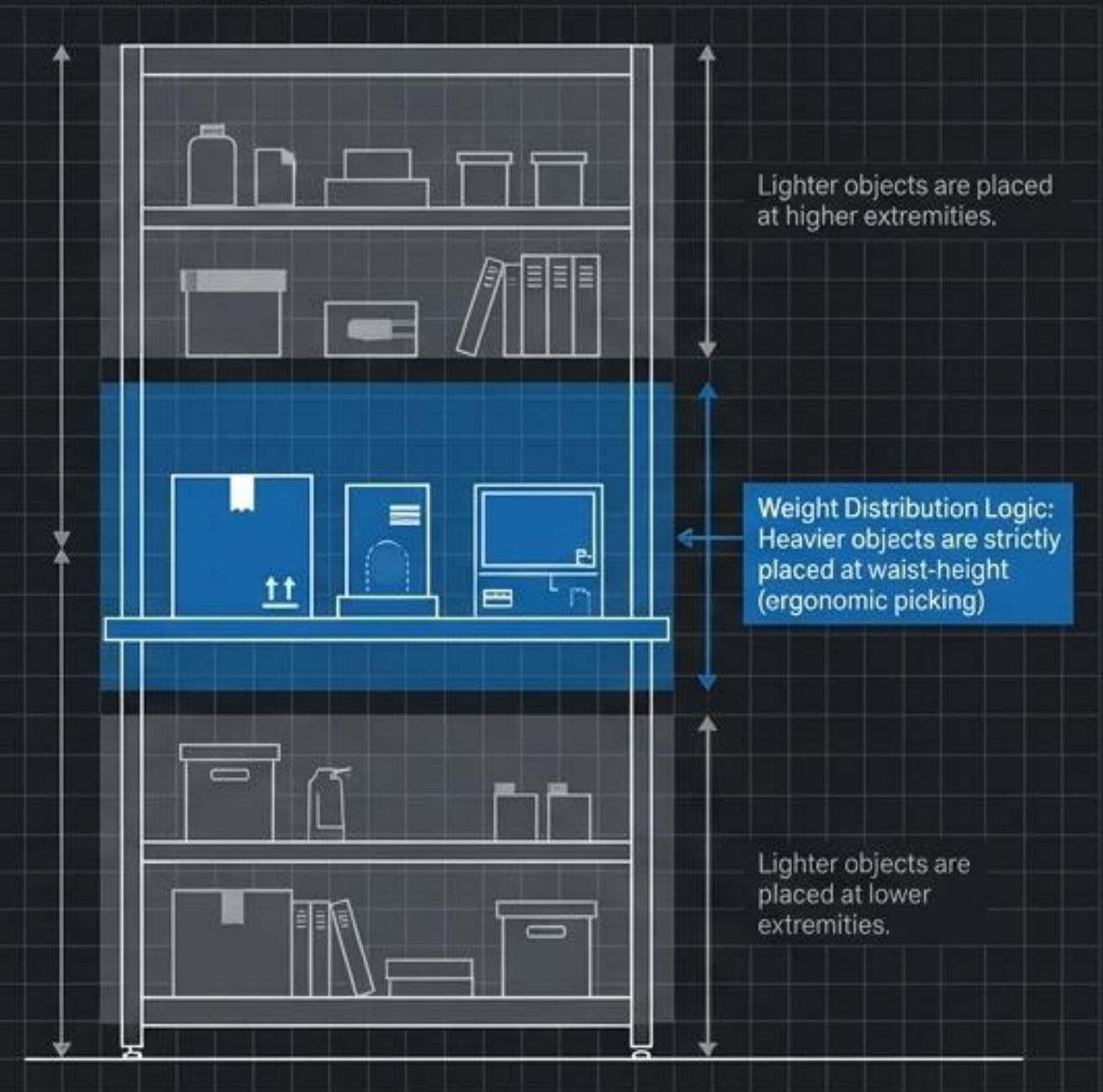
S2: Seiton (Set in Order) — Ergonomics & Access

"A place for everything, and everything in its place."

The Ergonomic Radius Model

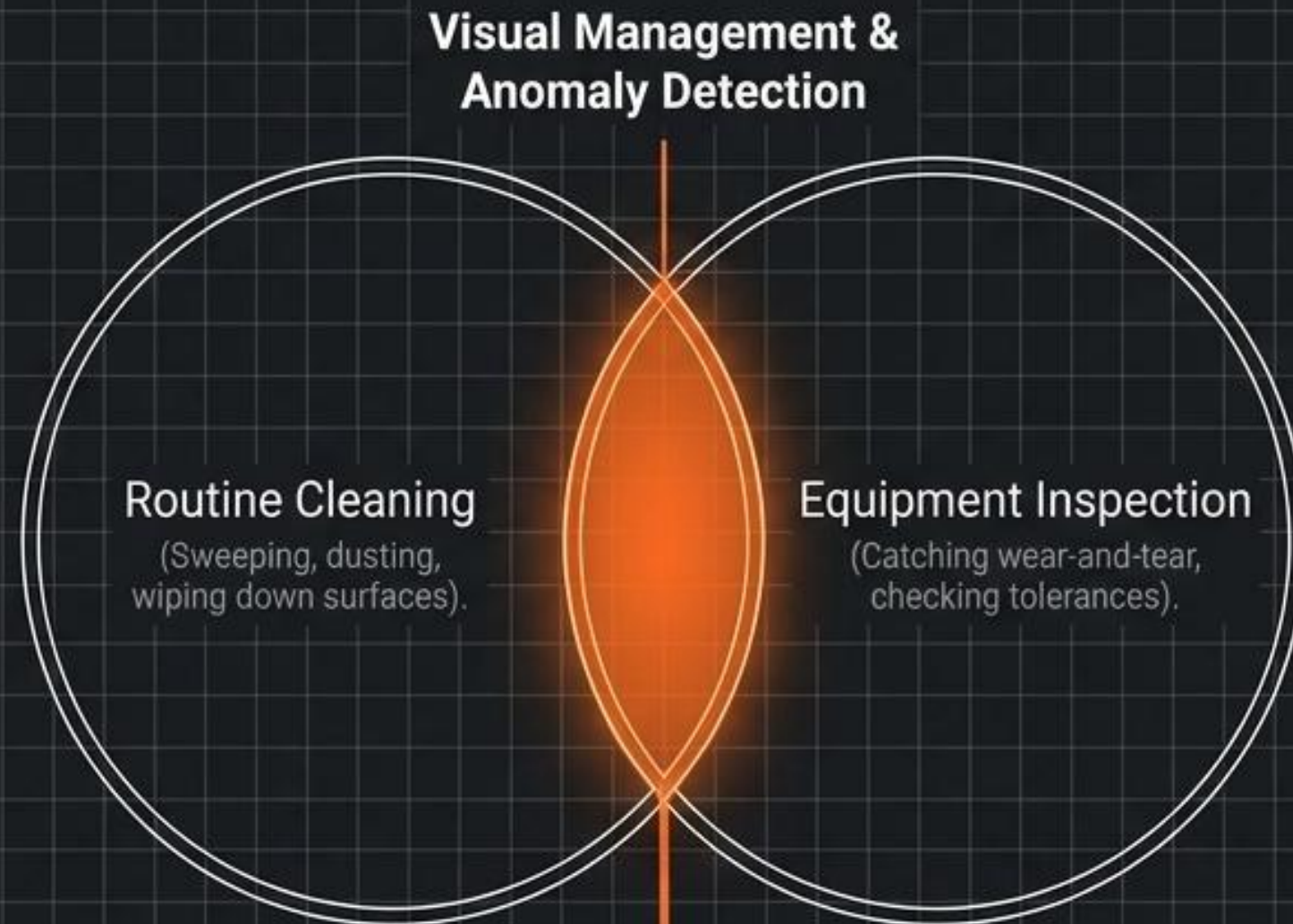


Vertical Elevation Callout



S3: Seiso (Shine) — Preventative Visibility

Cleaning is an inspection process, not a janitorial task.

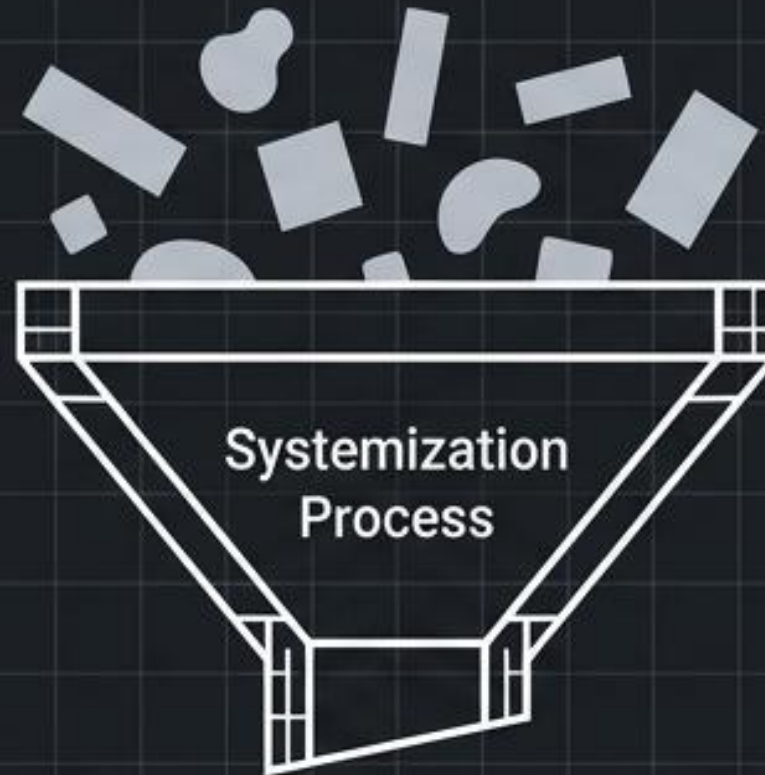


The Oil Leak Principle:

"You will not see an oil leak in an untidy, cluttered workshop. In a 'Shined' environment, dirt and leaks become immediately obvious anomalies, preventing serious equipment breakdowns."

S4: Seiketsu (Standardize) – Defining "Normal"

Converting one-time physical activities into systemic, repeatable habits.



Schedules

Posted Work
Instructions

Regular Task
Assignments

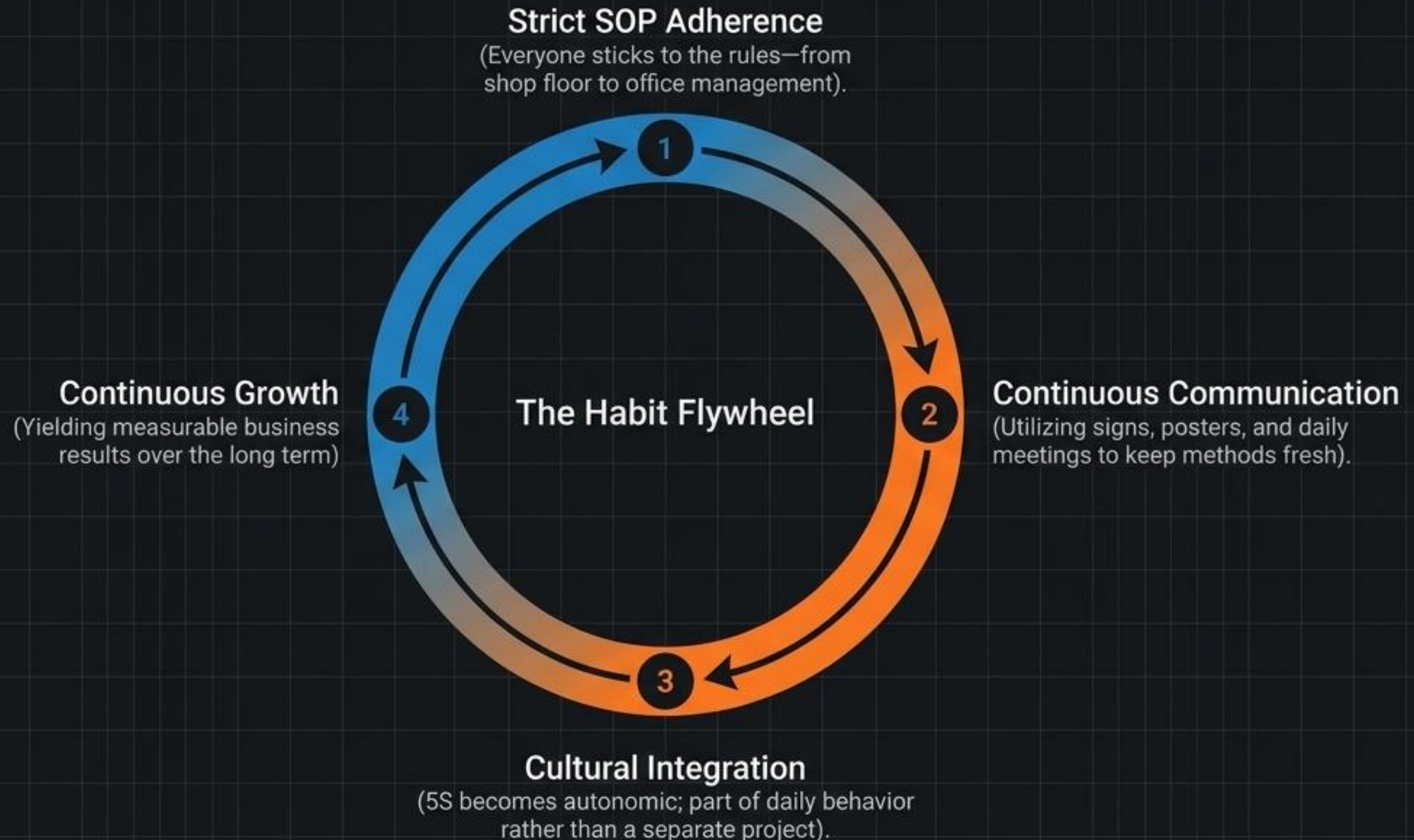
Color-coding

Documented
SOPs

Key Concept Callout: The ultimate goal of Seiketsu is to make the state of normal and abnormal conditions instantly recognizable to anyone on the floor.

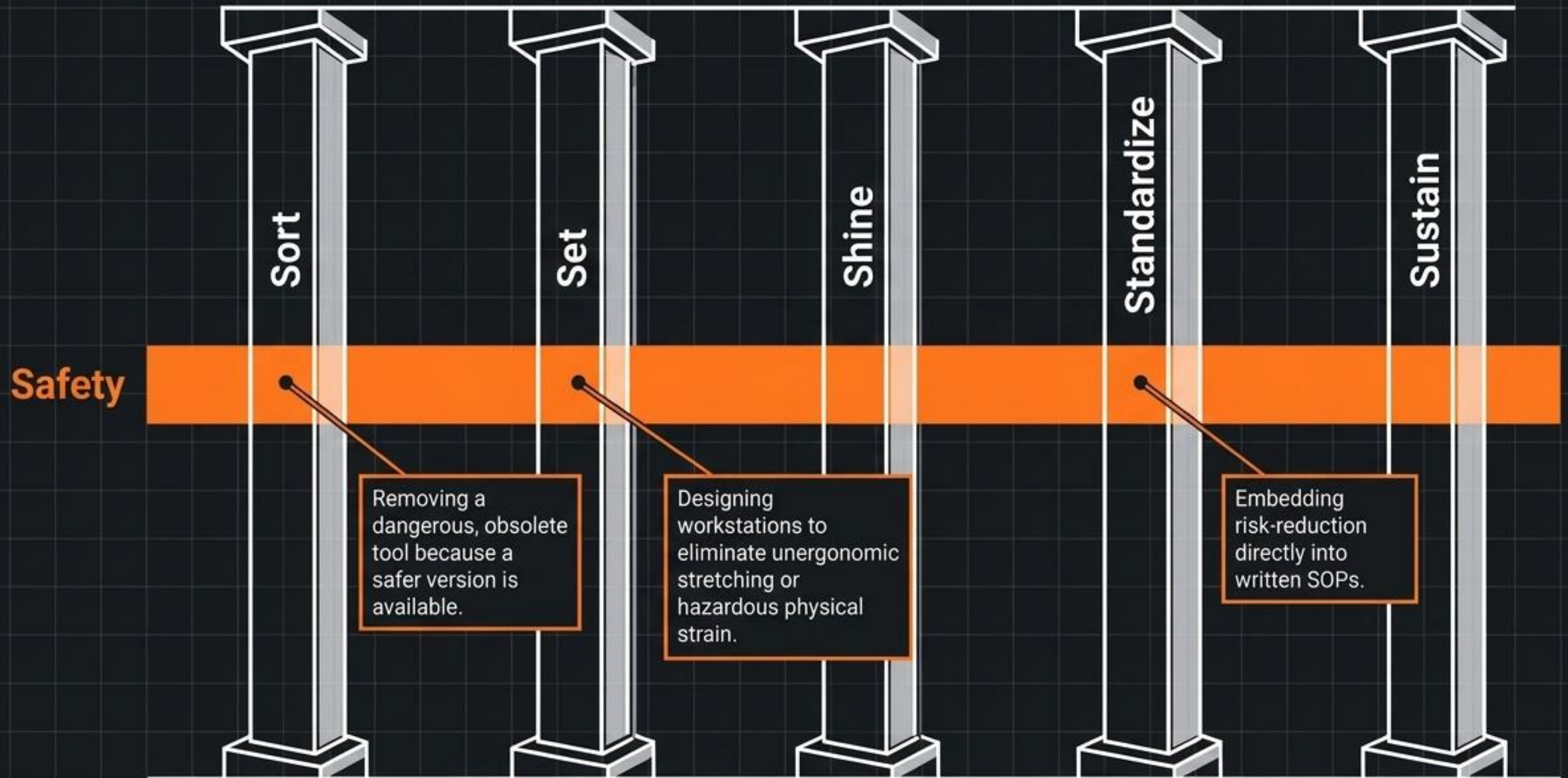
S5: Shitsuke (Sustain) — The Discipline Engine

The toughest phase: preventing the spiral back into chaos.



The 6th S: Safety — An Omnipresent Lens

Safety is not a sequential step; it is a filter applied to every action.



The 5S Transformation ROI

The measurable impact of moving from an unmanaged state to a 5S culture.

The Unmanaged State

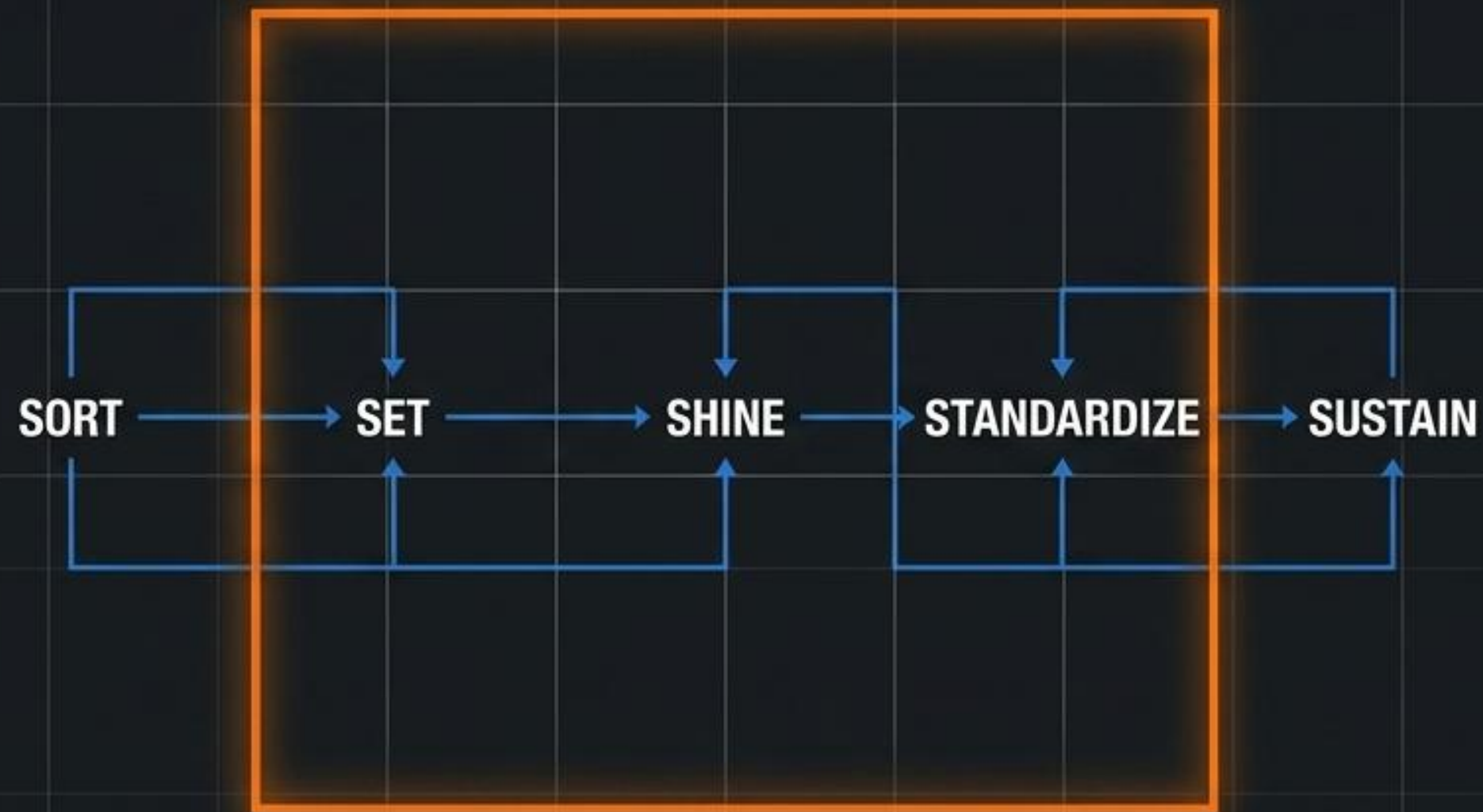
- ⚠ Hidden defects and frequent breakdowns.
- ⚠ Cluttered inventory masking supply chain issues.
- ⚠ Costly production delays and extended changeover times.
- ⚠ Higher risk of workplace injuries.

The 5S State

- ✓ **Zero Delays & Minimum Breakdowns.**
- ✓ **Zero Injuries & Ergonomic Workspaces.**
- ✓ **Higher Quality Products & Zero Defects.**
- ✓ **Reduced Costs & Inventory Footprint.**

THE BLUEPRINT REALIZED

Key Takeaway: A clean workspace is merely the symptom. A highly optimized, self-sustaining culture of continuous improvement is the cure.



FOUNDATION FOR CONTINUOUS IMPROVEMENT, ZERO DEFECTS, AND ABSOLUTE OPERATIONAL EFFICIENCY.