Force Preservation: A Campaign Model for Operational Excellence

A method for preserving managerial and operator time by controlling culmination, directing effort at the center of gravity, and scaling sustained gains across a plant.

Ref: Clausewitz, On War · US Army FM 3-0, Operations · Cooper, Kaizen Sketchbook · Imai, Gemba Kaizen · Kaizen Institute, the Kaizen Flag · Shewhart and Deming · Goldratt · Protzman · TPM, MDI, 5S, SMED and standard work

---

I — Publication

Force Preservation: A Campaign Model for Operational Excellence
A method for preserving managerial and operator time by controlling culmination, directing effort at the center of gravity, and scaling sustained gains across a plant.
Ref: Clausewitz, *On War* · US Army FM 3-0, *Operations* · Cooper, *Kaizen Sketchbook* · Imai, *Gemba Kaizen* · Kaizen Institute, the Kaizen Flag · Shewhart and Deming · Goldratt · Protzman · TPM, MDI, 5S, SMED and standard work

II — The Operating Constraint

Plant managers routinely commission improvement programs, assign leaders, schedule events and establish reporting. The programs operate for a period and then stop producing additional improvement. During that decline, the managers, engineers, supervisors and operators involved remain fully occupied. Meetings continue, actions are assigned, reports are issued and operating problems consume the available day. Activity remains high while the capacity to improve disappears.

This paper identifies the allocation of attention as the binding constraint on sustained improvement and treats that allocation as a managed operating condition. The sections that follow define a campaign model for directing attention, establishing accountability, returning capacity and controlling its subsequent use.

The allocation collapses when managers spend 95% of a ten-hour day on maintenance. That leaves zero time to get ahead. Email, calls, recurring disruptions and simultaneous assignments consume the available force. The manager remains active, yet the activity produces no capacity for sustained advancement.

The usual explanations identify discipline, engagement or commitment as the primary deficiency. These labels describe perceived behavior, but they do not identify an operating variable that a plant manager can change on Monday. They provide no basis for deciding which work should receive

attention, which obligations should be removed, how reclaimed capacity should be assigned or how the resulting allocation should be controlled over time.

This method was proven over no fewer than a dozen comprehensive deployments of a standardized Operational Excellence system, including successful and sustained MDI deployment across more than one-hundred machine centers within three quarters. The failure modes most likely to negatively impact deployment are implied throughout. However, a deep treatment of these failure modes is far beyond the scope of this article.

III — Force Preservation

Force Preservation is the strategy. If you preserve your force as much as possible, you can re-deploy them to take ground.

The “force” in question is managerial and operator time, and every phase, control and operating practice in this method serves that objective. A plant has finite attention available for maintaining current performance, improving existing processes and creating new operating capabilities. When maintenance consumes the available attention, improvement capacity disappears even while managers and operators remain fully occupied.

Maintenance is running the business. Standard work, executed reliably by managers and operators, is the means by which the plant produces, controls its processes, and meets its commitments. The required discipline is to vigorously segregate the time assigned to maintenance and innovation, then defend each allocation against unplanned transfer. An allocation devoted entirely to maintenance sustains current performance without advancing the operating system. An allocation devoted entirely to innovation leaves the current operating system without the management required for reliable execution. Both conditions are allocation failures. Senior executives provide a literal illustration: many spend more time in transit than at any single site, yet they still come down to each location and run the business on the ground. Force preservation therefore requires defined time for operating the current system and defined time for improving it, with each category receiving the attention required by its function.

Masaaki Imai describes the allocation problem in *Gemba Kaizen* through the relationship among three kinds of work: maintenance, kaizen and innovation. The Kaizen Institute draws it as the Kaizen Flag, a band for each level of the organization. The proportions move with the day’s need. An operator spends most working time on maintenance, meaning standard work, while a substantial 20 to 25% remains available for kaizen. An executive concentrates on innovation while continuing to perform maintenance work to a much lesser degree. Managers occupy the operating space between those roles and must retain enough capacity to maintain the present system while advancing it.

The executive’s maintenance share is force spent on signaling, and it protects the entire allocation. An executive who withdraws entirely from maintenance allows the organization’s regard for standard work to decay. That decay inflates the maintenance burden at every level below, consuming capacity that should remain available for improvement and innovation. The executive contribution can therefore occupy a small share of the total while producing a disproportionate effect across the organization. Visible participation establishes that standard work matters, reinforces the allocation

expected from subordinate levels, and limits the accumulation of avoidable maintenance. This is why the top band of the flag is small but never zero.

The same collapse occurs when an operator must repeatedly compensate for equipment conditions, missing standards, workplace disorder or unstable inputs. Time that could support kaizen is absorbed by maintenance and recovery. The resulting allocation prevents the organization from improving the conditions that created the demand.

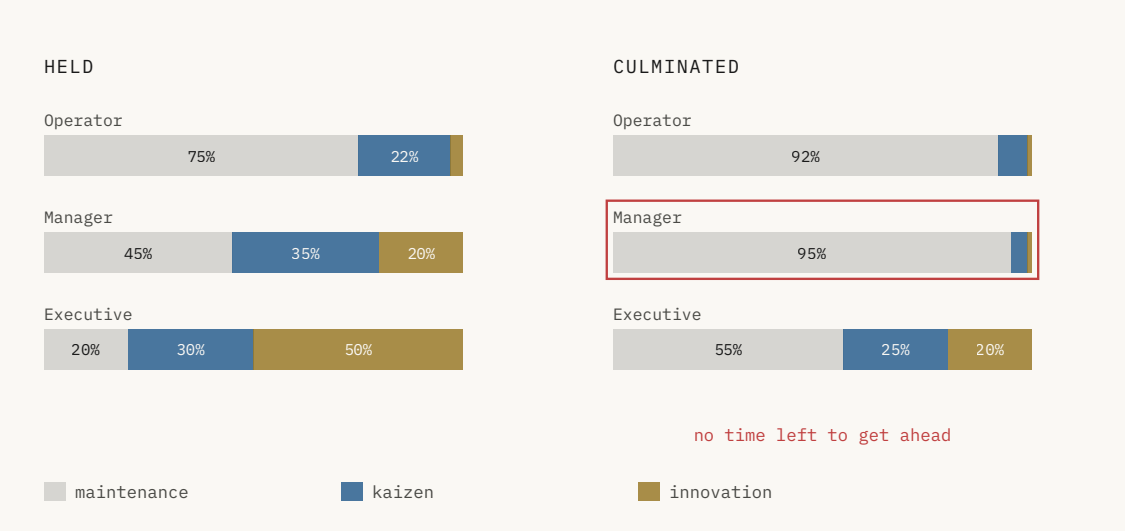


Figure 1. The Kaizen Flag. Time divides across maintenance, kaizen and innovation at every level. Proportions move with the day's need.

Force preservation therefore governs both the selection and the sequence of work. Heavy shaping reduces the uncertainty surrounding execution. A small breach operation limits the force exposed at one time. Consolidation protects the result and returns capacity to the organization. That returned capacity can then be committed elsewhere.

Culmination provides the control point. A campaign culminates when its force is spent, and in a plant the force is attention. Shaping heavily and breaching in tiny bursts minimizes force expended per unit of ground taken. Scaling from four areas to six, eight and fourteen works when each consolidated area returns capacity that becomes available for the next commitment.

IV — Culmination, Center of Gravity and Friction

Clausewitz provides three concepts for controlling the campaign: culmination, center of gravity and friction. The campaign phases are the operational expression of these concepts.

Culmination unfolds along a directed line, understood as a vector of effort, or at a point in time and space. It is the point at which further effort yields no strategic return. The causes in operational excellence are human and social: managerial attention disperses, working relationships deteriorate, commitments compete and the team loses the ability to sustain focused action.

The operating symptoms of culmination are direct: a manager absorbed by email, carrying nineteen priorities in place of one, and a team whose members distrust one another.

The point of intent is where the effort was expected to arrive. A campaign culminates prior to the point of intent when its actual culmination occurs before the work bears the expected fruit. It culminates posterior to the point of intent when the intended outcome has been realized from the effort. This distinction makes attention an operating constraint that can be planned, observed and protected.

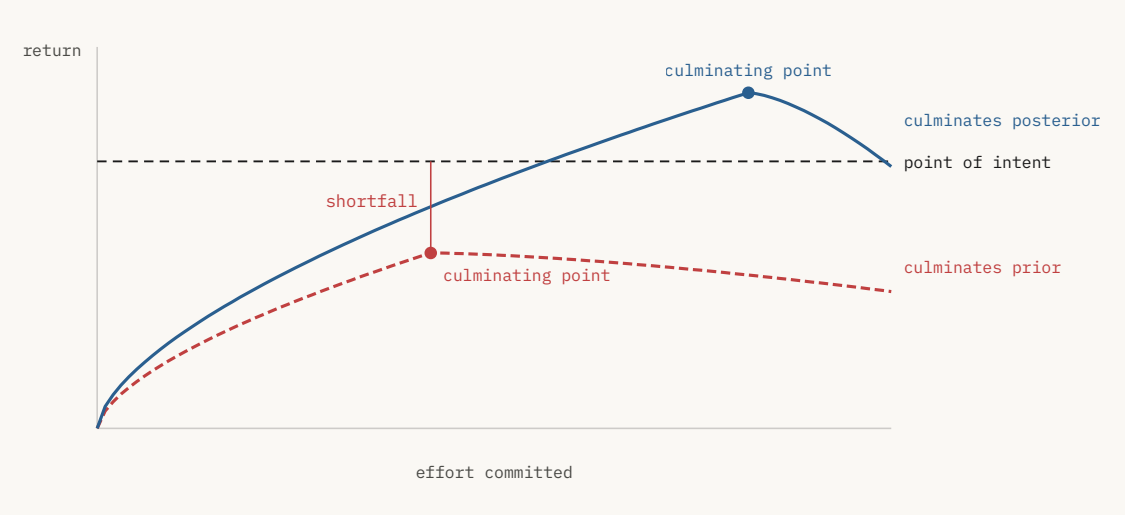


Figure 2. Return against effort. A campaign that culminates prior to the point of intent never realizes the outcome the effort was committed for. One that culminates posterior to it does.

Center of gravity identifies the point where effort has the greatest effect. It can be the root cause, the highest-leverage lever in the problem space, or both. Once identified, it becomes the point of intent.

The distinction is that between an NTSB investigation and a police investigation of a multivariate car accident: flying is made safer by addressing specific failures through a root cause countermeasure, while driving is made safer by improving the process of driving itself through kaizen.

This selection rule fuses three bodies of thought: Shewhart and Deming's special cause and common cause distinction, Clausewitz's center of gravity, and Goldratt's constraint as the rule for choosing which condition to attack. The problem type determines the form of action. The center of gravity determines where the action is directed. The constraint determines where limited force will produce the greatest strategic return.

Friction includes the social difficulty of introducing accountability and rigor, along with the daily effort required to address waste, imbalance and strain. It runs in two directions. Maintaining a defensive posture has friction: conditions remain unchanged, and people continue to fight operating problems on their own. Changing those conditions creates friction as the campaign works against defensive lines embedded in habits, relationships, routines and expectations.

The adversary is nothing more than layered imbalance and waste, deeply ingrained in a plant's culture and ethos.

V — Shape, Buttress, Breach and Consolidate

The campaign has four connected phases: shape, buttress, breach and consolidate. They control how much force is committed, where it is committed and how the resulting ground is held.

Shape. Shaping prepares the area through TPM, safety improvements, standard work, rigorous 5S, documentation and extensive relationship building with the people who perform the work. These activities reduce operating instability and expose the conditions that will govern execution. They also establish the communication required to see constraints and failure modes from the operator's position and cooperate effectively.

Trust plus communication produces bidirectional accountability, and there is no other route to it.

Buttress with MDI. Managing for Daily Improvement provides the system for controlling time, capacity and focus. Visual systems make work and commitments observable. Daily accountability establishes a recurring operating interaction. Leadership standard work maintains the management activity needed to protect the campaign from dispersion.

Breach, meaning execute. Execution occurs in tiny, laser-focused bursts against the selected center of gravity. The breach is deliberately small in relation to the shaping and consolidation that surround it. For SMED, 99% of the work is shaping and consolidation, and 1% is the breach operation, performed in place with the operator.

The ratio states an operating principle. The visible change made at the process is a small part of the total campaign. Equipment condition, workplace organization, documentation, relationships, standard work and follow-through determine whether the intervention can occur with limited disruption and whether the result will persist.

Consolidate. Consolidation secures the operating condition after execution. Process confirmation audits verify adherence to standard work and use every interaction with the person performing the work to probe for further opportunities from that person's point of view. Forced failure testing exposes weaknesses before routine operation does. Additional standardization incorporates what has been learned.

Consolidation then bleeds directly into shaping for the next campaign. The audit identifies further opportunities, the test identifies failure modes, and the revised standard creates a more stable base for the next commitment of force.

VI — Daily Accountability as a Contract

Daily accountability operates through a series of "newspapers" that manage activity. The visual record matters, although the interaction around it is the mechanism. The exchange establishes the work, the due date and the consideration owed by each party.

When an engineer agrees to do X by date Y, that commitment creates a contract. It exceeds the acceptance of a task because performance depends on reciprocal obligations. The engineer owes delivery of the specified result by the agreed date. The manager owes consideration in return: the

resources required for the work, an explicit allocation of time, and air cover. Air cover has a concrete meaning in this context. The manager tells the engineer to skip the four calls, do the thing, and leave the resulting pressure with the manager, who will take all the heat. That instruction clears the engineer's axis of advance and places responsibility for competing demands where it belongs. A date without resources, protected time, and air cover does not establish the conditions under which the commitment was made. The engineer's promise and the manager's consideration are reciprocal and conditional. Consideration runs both ways, and that reciprocity is what makes the agreement a contract.

The contract has consideration on both sides. The engineer accepts a defined deliverable and date. The plant manager supplies resources, allocates time and absorbs the organizational consequences of removing competing work. Air cover is the senior leader spending personal force to protect a subordinate's force. It transfers the calls, escalation and pressure to the level that has authority to absorb them.

This interaction prevents accountability from becoming an additional maintenance demand. A commitment without protected capacity adds another item to an already collapsed allocation. A commitment supported by air cover concentrates attention on the selected center of gravity and preserves the conditions needed to reach the point of intent.

MDI supplies the cadence for renewing and inspecting these contracts. Visual systems show the current commitments. Daily accountability tests whether the work remains feasible. Leadership standard work requires managers to provide the agreed consideration and address conditions that threaten focus. The newspaper records activity; the recurring management interaction controls the allocation of force.

VII — Scaling Through Returned Capacity

The scaling model begins by shaping four areas at once with a team. Man hours are distributed across those areas, and execution occurs opportunistically with a view toward minimizing long-term failure modes. Sustainment (or lack thereof) of prior gains governs the tempo of execution.

Once the four areas are 90% there, their time commitment drops. The freed capacity supports shaping a further six areas, followed by eight and then fourteen. Through this progression, the plant moves toward stability while each earlier cohort continues under consolidation and process confirmation.

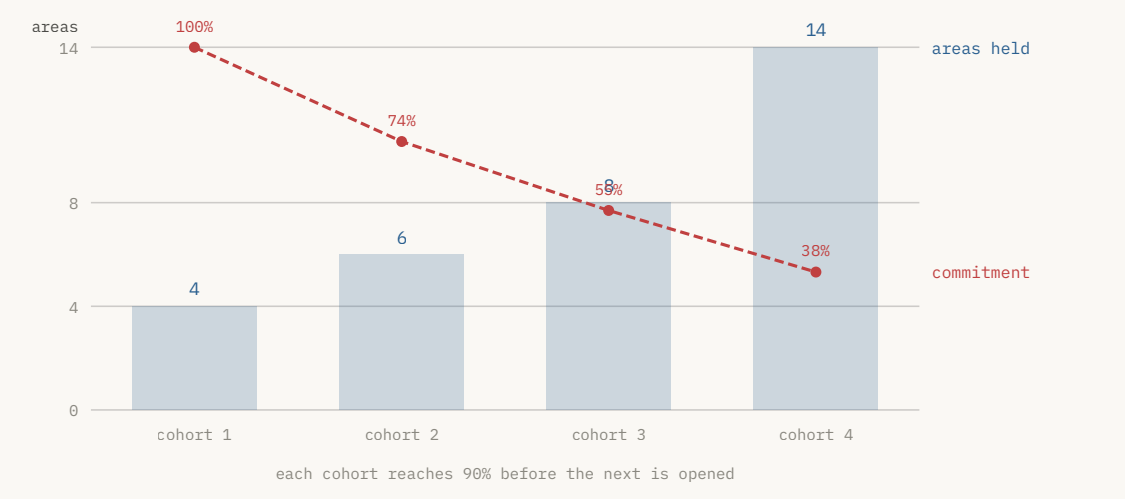


Figure 3. Areas held, and the commitment each costs. Each cohort reaches 90% and returns capacity before the next is opened.

The geometric progression is a commander refusing to advance past the culminating point. Each increase in scope depends on capacity returned by the preceding cohort. Areas that remain unstable continue to consume shaping or consolidation effort. Areas that reach the required condition release attention for deployment elsewhere.

This is the operational connection between force preservation and scale. Expansion follows verified reduction in commitment per area. The campaign remains bounded by the attention available to sustain current gains, manage active breaches and shape future areas. MDI makes those demands visible so the team can manage time, capacity and focus as connected constraints.

Scaling also depends on the quality of consolidation. Weak standards, superficial process confirmation (often lacking an interaction with the operator) or unresolved failure modes keep the old area dependent on repeated intervention. That dependency prevents the expected return of capacity and brings the broader campaign closer to premature culmination.

A consolidated area changes the allocation. Operators spend less time compensating for unstable conditions. Managers spend less time coordinating recovery and escalation. That recovered force becomes available for kaizen and for shaping the next areas. The sequence from four to six to eight to fourteen expresses that capacity transfer.

VIII — Reclaiming the Time Is Itself a Campaign

Reclaimed capacity arrives in minutes per day and compounds through repeated changes to management work. Expecting to flip a switch and drop 80% of daily standard work is asinine, and this would destroy the business. The governing rate is several minutes at a time, with each day establishing a new line of advance. Friction applies to the management system as directly as it applies to production. Reports, meetings, approvals, reconciliations, and inherited responsibilities persist until leaders identify and remove the conditions that continue to require them.

The method is training, drilling, and reflection. Training means repeating operations and activities with bi-directional feedback until they can be carried out consistently enough to highlight additional

friction. The leader goes to the operating area and performs process confirmations with their own subordinates. The leader is there and present, observes the work, verifies the standard, and develops the subordinate through repeated execution. This repetition establishes the capability required to transfer decisions and accountability without losing control.

Drilling means forcing failure in the management system to determine whether its controls function as expected. Flip the green card to red and see who notices, what they do, and whether they do anything. The result identifies gaps in recognition, escalation, ownership, and response. Reflection then closes the daily cycle: what went well, what did not go well, and what will be done differently tomorrow. These three activities expose friction and provide the means to remove it at the rate the organization can absorb.

The payback on time follows a practical sequence. Leaders first recover minutes by running fewer daily reports. A weekly inventory review is then dropped when there is no longer a point to holding it. The daily scheduling meeting is consolidated. The 1.2 hours of daily payroll is streamlined and distributed, since why does the shop supervisor own that? In the last case, the work remains necessary, while its ownership is corrected. Each change releases a small amount of capacity for the next requirement.

The plant manager is therefore running a multi-axis campaign. On the floor, TPS appears in its commonly recognized forms: kanbans go up, visual management is installed, and a SMED is conducted. At the same time, the plant manager conducts the quieter and more intensive development of the leadership team through training, drilling, and reflection. Both axes advance concurrently, and each depends on disciplined daily execution. This time does not simply appear. The plant manager must also fight for it.

IX — Campaign Control

Campaign control requires continual comparison among the point of intent, the center of gravity and the force available. These elements determine whether an area is ready for execution, requires further shaping or has entered consolidation.

CONDITION	CONTROL QUESTION	OPERATING RESPONSE
Allocation	Where are managerial and operator time being consumed?	Remove competing demands and protect capacity for the campaign.
Center of gravity	Which cause, lever or constraint offers the highest strategic return?	Set that condition as the point of intent.
Shaping	Are equipment, safety, standards, workplace condition, documentation and relationships ready?	Continue shaping until execution can remain narrow and controlled.
Breach	Can the selected action be executed with concentrated operator involvement?	Commit a small burst of focused effort.
Consolidation	Does the new condition hold under confirmation and forced failure testing?	Standardize, audit and probe for the next opportunity.
Culmination	Is attention still producing progress toward the point of intent?	Hold scope, restore capacity or reshape the campaign.

Friction appears throughout this control system. Relationship problems degrade bidirectional accountability. Conflicting priorities break contracts. Equipment and process instability consume operator time. Managerial maintenance absorbs the time required for shaping and consolidation. Each condition moves culmination closer.

Process confirmation provides direct information about those conditions. Its first role is verification of adherence to standard work. Its second role is inquiry: every interaction probes for further opportunities from the worker's point of view. The combined practice links sustaining activity to future shaping and keeps the campaign connected to actual operating conditions.

X — Campaign Heuristics

Three heuristics govern what a team attempts within a breach and how the result is measured after implementation. They provide a common sequence for selecting, testing and evaluating changes within the campaign model.

SID OTIS. MaryPat Cooper, author of *Kaizen Sketchbook*, published by Moffitt Associates in 2008, and the author's mentor, taught the following sequence for running an event:

- **S** — Safety and 5S
- **I** — Impact
- **D** — Deploy
- **O** — Observe
- **T** — Trystorm
- **I** — Implement
- **S** — Standard work

Safety and 5S establish the initial operating condition. Impact and Deploy form an impact-versus-effort matrix that determines what the team will attempt; Deploy, in the author's usage, means how the team thinks about that decision. Observation supplies direct evidence from the work. Trystorm means trying candidate changes in place, under operating conditions, with the result available for inspection. Implementation places the selected change into use, and standard work defines the method that will be maintained.

Eliminate, Combine, Rearrange, Simplify. Protzman taught this sequence as a direct test for changing work: eliminate what is unnecessary, combine related operations, rearrange their order or location, and simplify what remains.

Lead time over cycle time. Goldratt taught the governing measurement choice. Cycle-time improvements present as labor efficiency, but labor efficiency is a degenerate measure. Reducing labor toward zero can drive the reported ratio toward its apparent maximum while output also tends toward zero. The measure can therefore improve while the operating system ceases to produce, which makes it insufficient for campaign control.

Lead-time reduction measures throughput through the system. Delivering three times faster moves three times the volume through the same system and advances the point at which a shipment can be invoiced. The relevant comparison is visible in the large numbers under management. Inventory, work in process and backlog record material and demand that have not completed the system. Shipments made and accounts receivable to clear record completed flow awaiting payment. The former represents an operating problem; the latter is simply waiting on a check to clear. Campaign control measures consolidation through that movement from accumulated work to completed, billable output.

XI — The Work Behind the Result

Facilitators who have run this work in complex or difficult tier 2 and tier 3 manufacturers know that an outcome never arrives neatly packaged, amenable to everyone, or acceptable to every adversarial force. The work is usually a slog. Competing requirements remain active, people resist changes in accountability, and operating conditions continue to impose friction while the team attempts to improve them.

The fight is precisely why practitioners describe these events as they do. A team achieving something substantial is exceedingly rare. When it occurs, an observer usually sees the final condition, the measured outcome, and the people standing beside it. The observer does not see the repeated training, failed drills, daily reflection, corrected ownership, or accumulated decisions that produced that condition.

We often leave that effort out when we describe the result. Pride is the reason, and the correct name for it is arrogance. We want the outcome to appear more controlled and the method more conclusive than the experience was. I include myself and my peers in that admission. The concealed work remains part of the result and part of our responsibility for reporting it accurately.

SVEND is the consulting practice of Eric Wolters — operational excellence, quality management and strategic planning. ILSSI accredited, SCMEP Technical Partnership Provider.
svend.ai/whitepapers/force-preservation/ · published 6 October 2026