



FORGE

Document Classification

PUBLIC

This publication forms part of the Forge Public Series. It examines the specific conditions under which organisational behaviour becomes durably embedded, versus weak or unstable. It does not disclose Forge's proprietary assessment tools, diagnostic frameworks, or practitioner methods.

How Behaviour Becomes Embedded

Reinforcement, Codification, and the Conditions for Durable Organisational Change

“A written policy and an unwritten habit can produce the same weak result, for opposite reasons.”

PUBLICATION CLASS	Research Paper (Asphalt)
CLASSIFICATION	Public
PRIMARY AUDIENCE	CEOs, boards, executive teams, and transformation leaders
PURPOSE	To identify the specific conditions under which repeated organisational behaviour becomes durably embedded, versus weak or unstable
CITATION STANDARD	Every case drawn from documented historical record; companion to Forge Research Paper 001

Executive Summary

A companion paper, Forge Research Paper 001, found that repeated behaviour becomes embedded into an organisation's formal structure with near-universal consistency. That paper confirmed the pattern in 44 of 45 cases examined, regardless of whether the resulting structure was constructive or dysfunctional. That consistency raises a sharper question. If the relationship holds almost everywhere, what determines how strongly or durably it holds? This paper reports five further tests, each deliberately selected to challenge rather than confirm a working hypothesis, including one case where the authors' own initial assumption proved wrong and is reported as such, and one candidate explanation that was proposed, tested, and withdrawn in favour of a more precise one. The resulting evidence is consistent with behaviour embedding durably when reinforcement and codification, broadly defined, are present and aligned. It embeds weakly and unstably when either is present without the other, and defaults to reinforcement when the two point in different directions.

I Research Question

Given that behaviour appears to reshape organisational environment with near-universal consistency, what specific conditions determine whether that embedding is strong and durable, weak and unstable, or absent?

II Why This Matters

Leaders routinely attempt to change organisational behaviour through two broad instruments. The first is stating what is valued through codification, such as a policy, a mission statement, or a stated rule. The second is rewarding what is valued through reinforcement, such as compensation, recognition, or career consequence. Both instruments are commonly used together without examining whether they actually point in the same direction, or whether one exists without the other. This paper asks which combination, if any, reliably produces change that lasts.

III Method

Candidate Mechanisms

Four mechanisms were proposed before testing began, each intended to explain how repeated behaviour becomes structurally embedded: Frequency (repetition alone), Visibility (whether the behaviour is observable or trackable), Reinforcement (whether the behaviour produces a reward or consequence, formal or informal), and Formal Codification (whether the behaviour is written into policy or built into a recurring, systematic process, whether written down or not).

Initial Test

The four candidates were first checked against six cases selected for the depth of available documentation, deliberately spanning both constructive and destructive outcomes. Frequency was present in every case and did not distinguish outcomes. Reinforcement and codification appeared to explain the strongest and weakest cases in this initial set. Visibility's role was ambiguous.

Deliberate Challenge Tests

Five further cases were then selected specifically because each was chosen to test, and where possible break, the resulting hypothesis, rather than to add further confirmation. These were a case with reinforcement and codification actively pointing in opposite directions; a case intended to isolate codification without any reinforcement, but which on inspection turned out to have hidden reinforcement, prompting a revision to the working definitions; a second such case, used specifically to check whether that revision itself would hold; a case with clean, formal, written codification and genuinely absent reinforcement; and a case with substantial reinforcement and genuinely absent codification of any kind.

A Note on Method Discipline

Two results in this study did not confirm the hypothesis being tested at the time. Both are reported in full in Section 5, including the specific reasoning that led to revising the working definitions rather than discarding an inconvenient result.

IV Findings

Outcomes across the four structural combinations tested:

Condition	Observed Outcome	Representative Case(s)
Aligned (both present, same direction)	Strong, durable embedding	Alcoa, Toyota (original andon), Nucor, Semco
Conflict (present, opposite directions)	Reinforcement dominates; codified rule remains on paper but functionally inert	Bank of America investment banking hours
Codification present, reinforcement absent	Weak embedding, visibly erodes under pressure	University faculty shared governance
Reinforcement present, codification absent	Weak, unstable embedding, contingent on specific individuals	WeWork under Adam Neumann

A sixth, dated prediction concerns a large retail organisation's 2025 to 2026 withdrawal of a team-based reinforcement structure, while formal codified culture language remains in place. This prediction has been

recorded but is not yet due for review. It is reported here for completeness, and is not included in the findings above.

V Discussion

Frequency Is Necessary but Not Diagnostic

Repetition was present in every case examined, including the weakest. It appears to be a precondition for embedding to occur at all, but does not distinguish strong outcomes from weak ones.

Reinforcement and Codification Must Be Understood Broadly

Two cases initially selected to test codification alone, absent any reinforcement, instead revealed reinforcement operating in unwritten, peer-enforced, or procedural form. One showed a recurring biannual vote functioning as codification without ever being written down. The other showed peer economic consequence functioning as reinforcement without a formal bonus scheme. On the second such result, the originally proposed explanation, a fifth and independent mechanism of pre-existing organisational culture, was withdrawn in writing rather than retained. The definitions of reinforcement and codification were broadened instead to include informal and unwritten forms alongside formal ones.

Alignment, Not Mere Presence, Predicts Strength

A case with a formally codified rule and a reward structure pointing in the opposite direction showed the codified rule persisting on paper while having no functional effect on behaviour. Reinforcement appeared to dominate when the two conflict, rather than the two averaging out.

Absence of Either Component Produces Weakness, for Different Reasons

A case with clean, formal, written codification and no reinforcement of any kind showed the intended behaviour eroding visibly under real-time institutional pressure, despite the formal rule remaining unchanged. A separate case with substantial reinforcement and no codification of any kind showed real but unstable embedding, entirely contingent on one individual's continued presence, and collapsing once that individual left.

A written policy and an unwritten habit can produce the same weak result, for opposite reasons. One has a rule nobody is rewarded for following. The other has a reward nobody wrote down.

VI Strategic Implications

For CEOs

A stated value unaccompanied by a matching reward or consequence structure appears no more durable than having no stated value at all. Before assuming a policy has changed behaviour, it is worth checking what is actually being rewarded, and whether that reward points the same direction as the policy.

For Boards

Codified governance rules, such as committee charters, escalation policies, and whistleblower protections, warrant scrutiny not only for their existence but for whether the organisation's incentive structure genuinely supports them. A rule that conflicts with what is actually rewarded may function as a governance signal without governance substance.

For Executive Teams

Behaviour changes introduced through reward alone, such as a new bonus structure or an incentive campaign, without any accompanying formal or procedural reinforcement, may produce real short-term change that does not survive a change in personnel or leadership.

For Transformation Leaders

Assessing an organisation's readiness for behavioural change may be more productive when framed as a question about alignment between two existing systems, namely what is written and what is rewarded, rather than as a question about which new policy or incentive to introduce.

VII Questions Leaders Should Ask

- For a behaviour we have stated we want, what specifically happens, whether in compensation, evaluation, or informal consequence, to someone who does it, and to someone who does not?
 - Where our written policy and our actual reward structure might conflict, which one would an employee reasonably believe is the real rule?
 - Which of our current behavioural norms are backed only by habit or personality, with no written or systematic reinforcement behind them at all?
 - If the person currently enforcing a valued behaviour left tomorrow, would the behaviour persist?
-

VIII How Forge Uses This Research

Forge uses this research as one input into organisational assessment, specifically informing how the Observe and Diagnose stages of the Forge Method examine the relationship between an organisation's stated values and its actual incentive structure. No single finding from this study should be applied to a specific organisation without direct examination of that organisation's own conditions.

IX Research Boundaries

The candidate mechanism reported here was generated from six cases and tested against five further cases. This is a modest sample for a mechanism-level claim, and smaller than the case base supporting the broader five-loop findings in Forge Research Paper 001. Coding is qualitative and drawn from historical and documentary record rather than controlled conditions. Unlike some other findings in this research programme, this mechanism has not yet been validated through a genuine prospective prediction, meaning a prediction stated before research and confirmed against a case chosen for difficulty, with the exception of one dated prediction still pending review. This paper reports a pattern consistent with the evidence gathered. It does not claim the pattern has been established to the same evidentiary standard as findings that have cleared that higher bar.

X Future Research

A dated prediction concerning reinforcement withdrawal at a large retail organisation remains open, and is not due for review before 2027. Whether this mechanism generalises to loops beyond Behaviour → Environment is a natural next question, addressed separately for Culture → Leadership in Forge Research Paper 003.

XI Strategic Application

The tests underpinning this specific mechanism draw on organisational moments where reinforcement and codification were either genuinely aligned, genuinely absent, or genuinely in conflict, not hypothetical conditions:

- **Rapid growth or scale-up.** This is the point at which an informal, founder-driven reward structure needs to become codified, or risks remaining fragile and person-dependent, as at Semco and WeWork.
- **Restructures and cost pressure.** These cases show codified rules quietly losing practical force as budget or margin pressure changes what is actually rewarded, as in faculty governance under funding pressure and Bank of America's hours culture.
- **Culture change programmes.** These cases raise the specific, checkable question of whether a new stated value is backed by a matching change to compensation and evaluation, or introduced alongside an unchanged incentive structure, as at Bank of America and Wells Fargo.
- **Safety-critical operations.** These cases test whether a safety behaviour is both codified, meaning written into procedure or built into a recurring, systematic process, and reinforced, meaning tied to real consequence. The strongest and most durable cases in the evidence base are precisely the ones with both present and aligned, as at Alcoa, Toyota, and Nucor.

Where a leader's current question is specifically about whether a stated behavioural change will hold, rather than whether it can be introduced at all, the alignment condition described in Section 5 is the most directly applicable finding.

XII Strategic Reflection

The organisations in this study that changed durably were not the ones with the most inspiring policy language. They were the ones where the policy and the paycheck agreed with each other.

Most organisational change efforts default to one instrument or the other. Some default to a values refresh, a new mission statement, or a training programme. Others default separately to a new incentive scheme, a bonus redesign, or a recognition programme. The evidence here suggests that either instrument alone, however well executed, produces a comparatively fragile result, durable only in the sense that it survives until the next audit, the next leadership change, or the next quarter's pressure. The more consequential question for a leader is rarely which new policy or incentive to add. It is whether the ones already in place are quietly working against each other, and whether anyone in the organisation has ever been asked to check.