Leading Through Transition: Evaluating Engineering Transformation in a Scaling Organization

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Abstract

This paper analyzes the transformation of XYZ's engineering business unit during the company's transition from start-up to SME. Faced with technical debt, delivery delays, and organizational stress, XYZ launched a major restructuring to increase throughput at its operational bottleneck—the engineering department. The new CTO implemented a task-aligned strategy emphasizing process redesign, modern engineering practices, and expert coaching. Using Lewin's Force Field Analysis and Bridges' Transition Model, the study assesses how the organization managed both the structural change and the human transition. Findings show that XYZ's success stemmed from removing restraining forces—such as complexity, mistrust, and skill gaps—rather than intensifying pressure for change. Although the early phase of "letting go" was insufficiently supported, strong leadership, communication, and quick wins helped guide teams through the neutral zone to full adoption. The transformation stabilized operations, improved collaboration, and laid the foundation for sustained organizational learning.

Introduction

XYZ is a tech company that offers services through an online platform where contractors can upload their legal documents. The enterprise is transitioning from a small start-up to an SME, reporting double-digit growth over the past six years.

This organic growth triggered adverse emergent properties that inhibited the company's main value drivers, including the inability to deliver new features, seize new market opportunities, and customer dissatisfaction, as well as stress and anxiety within the organization.

XYZ's systemic analysis revealed that the engineering department was the organization's bottleneck. To increase the flow of the constraint, the company initiated a revitalization effort mainly focused on this business unit. The adjustments performed in this function resulted in changes at other organizational levels.

Methogology

This study adopts a qualitative case study approach to examine XYZ's organizational transformation during its transition from a start-up to a medium-sized enterprise. The research focuses on the engineering business unit, identified as the company's operational bottleneck, to understand how structural and behavioural change unfolded within a high-growth context.

Data were collected through internal documentation, project retrospectives, and interviews with key stakeholders, including the Chief Technology Officer (CTO), engineering managers, and software developers involved in the transformation. These materials provided insights into both the formal restructuring process and the informal human dynamics accompanying it.

To analyze the change, two complementary theoretical models were applied: Lewin's Force Field Analysis and Bridges' Transition Model. Lewin's framework helped assess the driving and restraining forces shaping organizational equilibrium and revealed how XYZ's strategy focused on removing obstacles rather than amplifying pressure for change. Bridges' model complemented this analysis by exploring the psychological dimension of transition, highlighting how individuals within the organization internalized and adapted to change over time.

This dual-lens methodology enabled a comprehensive evaluation of both the structural mechanisms and the human experiences that determined the success of XYZ's transformation, aligning analytical rigor with practical organizational insights.

Change Process and Implementation

Nature and Scope of the Transformation

XYZ's transformation was both structural and cultural in nature, initiated within the engineering department, the organization's operational bottleneck, and designed to restore performance, reliability, and alignment with business objectives.

At the structural level, the company appointed a new Chief Technology Officer (CTO) to spearhead the initiative. His first actions were decisive: he replaced the existing technical leadership, project managers, and senior developers with new hires and external experts who embodied the mindset he aimed to instill. To protect the teams from conflicting priorities and managerial interference, he also restricted direct communication between upper management and engineering, creating a clearer hierarchy of accountability.

Technologically, the new leadership introduced a completely different technical stack, deliberately breaking with legacy systems to foster a new organizational dynamic. Although this top-down decision triggered significant turnover, it served its intended purpose: accelerating the cultural reset and enabling the adoption of modern engineering practices.

Parallel to these structural and technological changes, external consultants collaborated with internal teams to implement state-of-the-art processes and tools. These included improved software quality assurance, iterative product design, and the introduction of self-organized, cross-functional teams supported by fit-for-purpose digital tools. Together, these interventions sought to replace outdated practices with an agile, quality-driven development culture.

The driving forces behind this transformation were both reactive and proactive. On one hand, chronic delivery delays and system instability pushed the company to consider rebuilding its core platform from the ground up. On the other, the prospect of entering the German market pulled the change forward, creating urgency for a more scalable and efficient technological foundation. The resulting transformation thus combined necessity with opportunity, balancing short-term remediation with long-term strategic ambition.

Strategic Approach to Change

XYZ's transformation followed a task-aligned strategy as conceptualized by (Beer, Eisenstat, & Spector, 1990), emphasizing alignment between organizational structures, roles, and the specific work to be accomplished. The CTO began by redefining all roles and responsibilities within the engineering unit, replacing hierarchical control with accountability centered on task ownership. External experts were brought in not as permanent leaders but as catalysts to model the desired practices and mentor internal staff. This approach enabled teams to progress organically through the classical group development stages (i.e., from forming and storming to norming) as they internalized new norms and workflows.

The development strategy also reflected a pragmatic sequencing of priorities. Initial efforts targeted peripheral features, allowing teams to experiment, learn, and refine their methods before tackling the company's core systems. This gradual convergence minimized operational risk while building technical and organizational maturity through iterative learning.

After two years, all customers had successfully migrated to the new platform, and the legacy system was fully decommissioned. The engineering department stabilized with minimal subsequent turnover, indicating improved engagement and retention. As the external consultants completed their mandate, internal teams continued to develop new competencies autonomously, demonstrating that the change had evolved from a top-down intervention into a self-sustaining system of continuous improvement.

Managing Resistance and Building Commitment

The engineering department encountered barriers to change from both inside and outside the business unit. Internally, most people were **unfamiliar with the methods and technologies** they had to master. Besides hiring expert consultants, the company overcame this barrier by fostering self-organization among teams to create a "team of teams" (Tuckman's performing stage).

Moreover, the **impatience and general lack of trust** from the rest of the company generated anxiety among the engineering department's employees. Consequently, XYZ decided to release features early and often to achieve quick wins, over-communicate every success to educate about the change and vision, and commit only to what the teams could realistically deliver.

Leadership and the Role of the Change Agent

Throughout the revitalization effort, the CTO relentlessly championed change and was accountable for its progress. As a change agent, he displayed a set of skills, including speaking skills, openness and adaptiveness, analytical skills, leadership, and resilience.

He used these assets to communicate a **clearly articulated vision** about the desired future in an open and regular manner. Moreover, he stayed positive yet realistic about the situation, celebrated small successes and collected **feedback** continuously. Otherwise, he surrounded himself with competent people (e.g. technical experts and leaders) to fill his knowledge gap in specific areas.

However, he lacked listening skills and **empathy**. As a result, he did not manage conflicts, nor did he provide sufficient support to the employees (e.g. interpersonal support).

Assessment of the Organizational Change

The following section will examine two essential facets of the revitalization effort: the **change process** (i.e. what is happening concretely) and the associated **transition** (i.e. how each individual comes to accept change and leverage it).

The assessment will use two complementary models. Lewin's Force Field Analysis will help understand the change's dynamics. Besides, Bridge's Transition Model will serve to evaluate the organization's transition management.

Lewin's Force Field Analysis

The Force Field Analysis provides a robust framework for planning change by identifying the forces influencing the system: the **driving forces** that support the change and the **restraining forces** that act as obstacles (Spier, 1973).

It is a liberal instantiation of Newton's second law, which implies that the sum of all forces applied to a system in static **equilibrium** is zero. In this context, the equilibrium is when the organization's state stabilizes.

Initial Static Equilibrium

The following schema illustrates the force field before the revitalization effort.

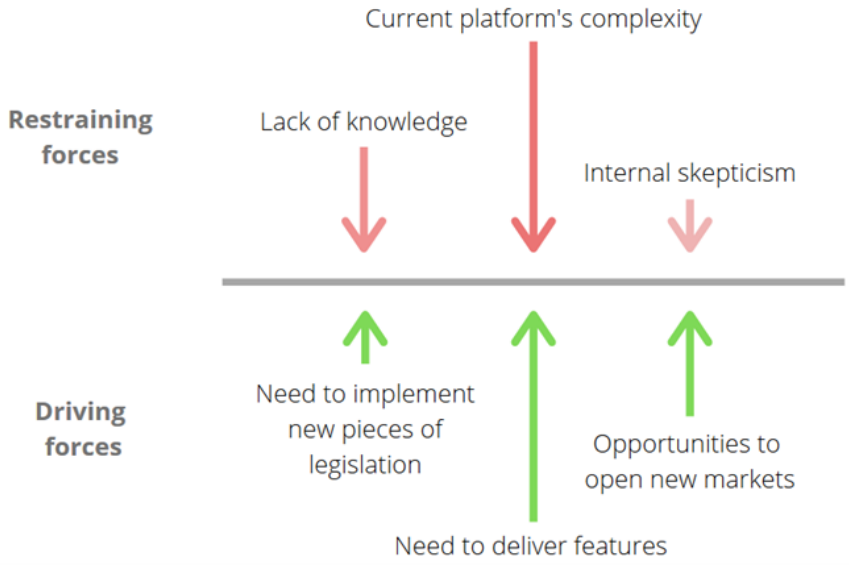

Figure 1: XYZ's force field before the change. The sum of all forces is zero, creating a static equilibrium (status quo).

Moving the Equilibrium

XYZ decided to act on these forces to move the equilibrium towards the desired situation. The list below analyzes the actions the company performed.

- **Opportunities to open new markets**: New opportunities in Europe intensified this force significantly.
- **Current platform's complexity**: XYZ relieved this force's pressure by building a leaner platform. Indeed, the teams were able to deliver new features without having to manage the current platform's complexity.
- **Internal skepticism and lack of trust**: Through the enthusiasm generated by quick wins, this force ceased to be an obstacle and became a driver.
- **Lack of knowledge**: This force became a driver thanks to the expert consultants, who instilled knowledge and new practices into the teams. Moreover, the high turnover among long-time employees eased the adoption of these practices and reinforced this trend.

This analysis illustrated that XYZ's task-aligned strategy focused on **removing the restraining forces** instead of merely adding new driving ones. This approach is generally more likely to bring **stable changes** as it removes forces that were pushing for a return to old behaviours – thus reducing entropy (Spier, 1973), (Beer, Eisenstat, & Spector, 1990).

Bridge's Transition Model

The Transition Model focuses on understanding and managing transitions during change. According to this model, a transition is a *"three-phase process that people go through as they internalize [...] the details of the new situation that the change brings"* (Bridges & Bridges, 2016). Ideally, the change process and transition occur concomitantly, but they can also happen on different timelines. It is also important to note that this process is not linear – all phases take place simultaneously (see Appendix 1).

The sections below will evaluate XYZ for each phase against the actions that the model advises (Bridges & Bridges, 2016).

Phase 1 – Ending, Losing, Letting Go

People are often initially resistant to change because they must move away from a familiar situation where they have developed habits. During this first phase, they should become open to change by acknowledging and accepting the end of the status quo. The figure below summarizes XYZ's assessment for Phase 1.

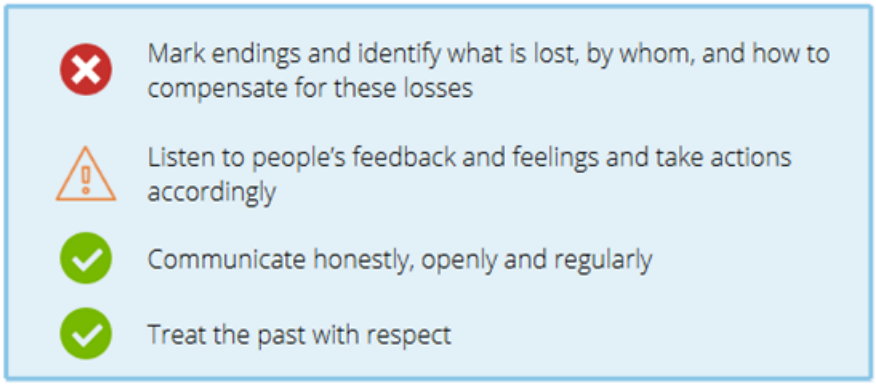

Figure 2: Assessment of XYZ's Phase 1.

According to (Beer & Nohria, 2000), change agents should balance theory E (tasks and structure) and theory O (people and emotions) to effect change efficiently. Nevertheless, the CTO's mindset was extremely biased towards theory E, and he thus listened only to people's task-related feedback. Consequently, employees grew resentful of the company. Most of them left since their work no longer met their intrinsic motivations (EPM, 2018).

On the other hand, sharing the same information simultaneously with everyone prevented a "Broken Telephone" phenomenon and effectively helped people understand why XYZ needed to change and what was in it for them. It also soothed the anxiety associated with uncertainty.

Finally, the CTO regularly acknowledged that the past led the company to its current position but explained why the status quo would not help the company move forward.

Phase 2 – The Neutral Zone

The neutral zone is the most crucial phase of the transition as it is a *"critical, ambiguous, uncertain time where leadership is highly required"* (Bridges & Bridges, 2016). The figure below summarizes XYZ's assessment for Phase 2.

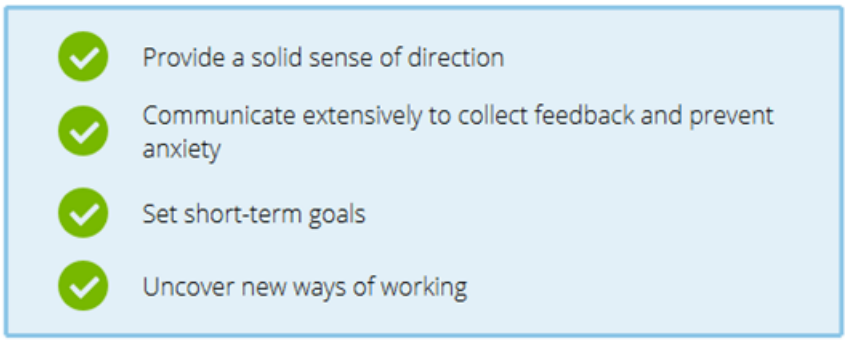

Figure 3: Assessment of XYZ's Phase 2.

This phase is an excellent opportunity for creativity and innovation (Bridges & Bridges, 2016). By fostering self-organized teams, XYZ was encouraging people to identify and solve problems themselves.

Moreover, setting clear expectations prevented people from making assumptions and aligned them all in the same direction. This action increased the chances of achieving the desired future.

Otherwise, small and frequent releases enabled quick wins. The teams celebrated and advertised these small successes throughout the company, boosting confidence and generating a sense of progress.

Finally, collecting concerns enabled double-loop learning and allowed the CTO to adapt the course of action to address what could get in the way of the desired future (Argyris, 1977).

Phase 3 – The New Beginning

In this last phase, people are embracing the change and are open to learning the skills they will need to perform within the new context. The figure below summarizes XYZ's assessment for Phase 3.

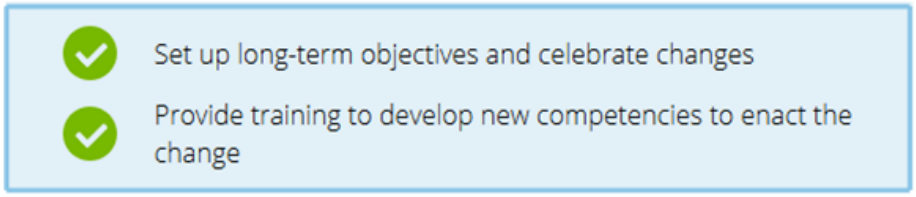

Figure 4: Assessment of XYZ's Phase 3.

The CTO's long-term goal was to remove the existing platform entirely and replace it with the new one. Although he did not express this objective explicitly in the early days, he started to communicate it more frequently when people entered this transition phase. Each milestone reached was an opportunity to celebrate and reiterate the team's commitment to this endeavour.

Furthermore, XYZ imposed new roles and responsibilities on their employees to ensure long-lasting changes in their behaviour (Beer, Eisenstat, & Spector, 1990). The company relied on its expert consultants to provide coaching and help people assume their new responsibilities.

Overall Assessment

XYZ **overlooked** the first transition phase. However, this situation did not jeopardize the whole process, as most employees in the department were newcomers with no baggage. Moreover, **extensive communication** reduced anxiety and self-absorption, typically experienced during this phase (Bridges & Bridges, 2016).

On the other hand, the CTO showed **strong leadership** to get the teams through the following phases – notably, the neutral zone. Also, he shielded the employees against external perturbations to give everyone the time and space to reorient themselves.

Discussion

XYZ's transformation illustrates how structural and cultural renewal must evolve in parallel for change to endure. The company's early-stage dynamics, a fast-moving but fragmented engineering culture, had generated both innovation and instability. The CTO's task-aligned strategy effectively addressed these issues by redefining accountability, simplifying processes, and embedding learning mechanisms within teams. Through this approach, XYZ exemplified the shift from reactive adaptation to systemic alignment, where structure, process, and culture reinforce one another.

Viewed through Lewin's Force Field Analysis, the CTO reduced restraining forces rather than amplifying driving ones. Instead of imposing pressure for compliance, he removed systemic barriers (i.e., legacy technology, overlapping roles, and conflicting directives) that constrained performance. This enabled the organization to unfreeze entrenched patterns organically, allowing new practices to gain legitimacy from the bottom-up.

From a transitional perspective, the human dimension of change proved equally crucial. The CTO managed uncertainty by creating psychological distance between engineering teams and upper management, providing the space necessary for experimentation and learning. Over time, this autonomy cultivated trust, ownership, and a collective sense of purpose, key elements in sustaining commitment once the external consultants departed.

Importantly, the process also demonstrated that cultural maturity develops incrementally through cycles of practice, reflection, and reinforcement. The progression from dependency on external expertise to internal self-sufficiency marks a critical inflection point in XYZ's organizational learning. By institutionalizing continuous improvement, the company transformed not only its systems but its capacity for renewal.

Ultimately, XYZ's experience underscores that lasting change in high-growth organizations stems from strategic coherence and psychological alignment: the integration of formal redesign with human adaptation, where operational excellence becomes a lived, self-reinforcing culture rather than a temporary initiative.

Conclusion

XYZ successfully undertook significant changes within its engineering business unit to tackle the critical challenges it was facing.

The assessment of the company's change management using Lewin's Force Field Analysis and Bridges Transition Model revealed that XYZ's task-aligned strategy efficiently removed forces that were impeding change. Moreover, the CTO's strong leadership drove the teams through the transition, even though his efforts in the mourning process were insufficient.

These actions enabled the change and provided the company with long-lasting effects.

Appendices

Appendix 1. The Three Phases of Transition

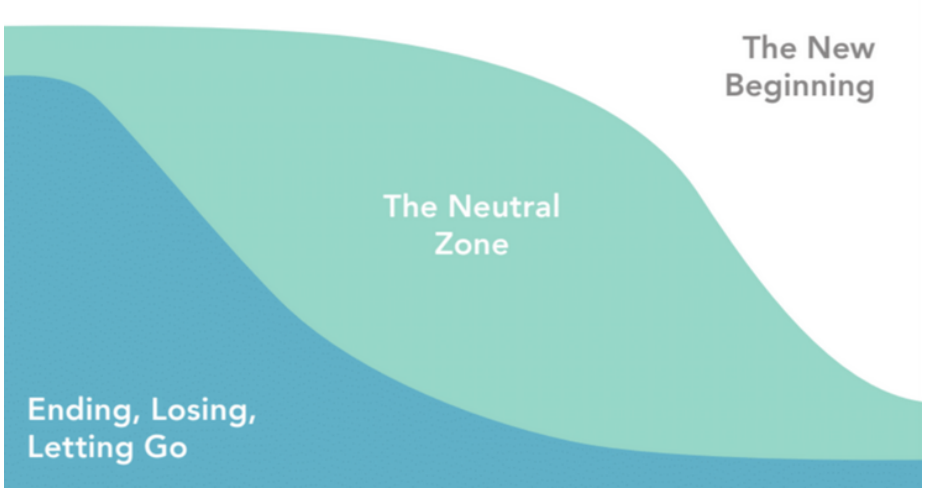

Figure 5: Bridges' three phases of transition. Phase 1 is more prominent at first, and Phase 3 takes over near the end. Source: letterpress.se

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