Operational Excellence in High-Growth Environments: A Case Study on Scaling Without Losing Value

Nadia Z. Humbert-Labeaumaz

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Abstract

This case study examines how XYZ, a rapidly growing French tech company, applied operational excellence to sustain value delivery during its scale-up. Initially, the firm's fast expansion created complexity, inefficiencies, and quality issues that hindered customer satisfaction and productivity. A systemic analysis revealed that the IT department had become the organization's primary bottleneck. Drawing on the Theory of Constraints and Operational Excellence frameworks, the study identifies root causes across people, processes, and management systems, emphasizing the limits of the start-up mindset and the lack of mature engineering practices. The paper proposes practical recommendations— forming cross-functional feature teams, reducing work in progress, allocating time for unplanned tasks, and applying root cause analysis—to increase throughput and simplify operations. By embedding agile and continuous-improvement principles, XYZ rebalanced performance, enhanced collaboration, and restored value delivery capacity, demonstrating how operational excellence can transform a start-up's growth into sustainable scalability.

Introduction & Background

XYZ is transitioning from a small tech start-up to a larger organization, reporting double-digit growth over the past six years. Today, the company is experiencing difficulties in satisfying its customers' needs. This briefing aims to provide the company with recommendations on how to keep delivering value during its ongoing scale-up phase.

By law, French businesses in specific industries must collect and authenticate their contractors' legal documents or delegate this task to a trusted third-party, such as XYZ. The company offers its services through an online platform where contractors can upload their documents. XYZ's purpose is to reduce its customers' administrative burden, allowing them to focus on their core business activities.

Since its inception, XYZ has developed a strong customer-centric culture. However, the company has built the platform hastily to reduce the time to market and meet all its customers' needs, cutting corners on upfront design, simplicity and robustness.

To manage its current growth, the company has recently decided to reorganize its upper management team by adding a CFO, CTO and COO to take on some of the CEO's responsibilities.

Current state

Process

- Manual, repetitive work that can be readily automated (e.g. document scanning, data extraction, trivial validation, payment)
- People following cumbersome processes
- The last issue always becoming the most urgent

Behaviours

- Customer-facing staff making new promises to customers without involving other relevant stakeholders (e.g. IT)
- Internal customers neglected in favour of external ones
- Employees dedicated to meeting the customers' needs and expectations

Management system

- Ad hoc features, operations and processes for specific customers
- Leadership team encouraging and supporting staff to take initiative
- Limited interactions between the different departments

Emergent properties

In this context of scale-up, these actions and behaviours have triggered the following emergent properties, inhibiting XYZ's main value drivers (i.e. compliance, productivity, cost and quality).

- Service-level agreement not met (e.g. validation time) [Compliance, cost, quality]
- IT department unable to deliver what is expected (features and support) [Productivity, quality]
- Platform frequently failing to meet new user needs (e.g. handling documents for multi-branch businesses) [Compliance, quality]
- Bugs and downtime [Cost, quality]
- Errors (e.g. wrong document validation) [Compliance, quality]
- Numerous moving parts in the system [Cost, productivity]
- Unused features [Cost, quality]
- Poor user experience on the platform [Productivity, quality]
- Frustration among employees and customers [Quality]

These properties can be associated with four types of waste: defects, waiting, extra-processing and non-utilized talent.

Analysis

The observations above served as input to paint the "big picture" of the organization. It revealed that, during the ongoing scale-up phase, the main risks for XYZ come from its people and processes.
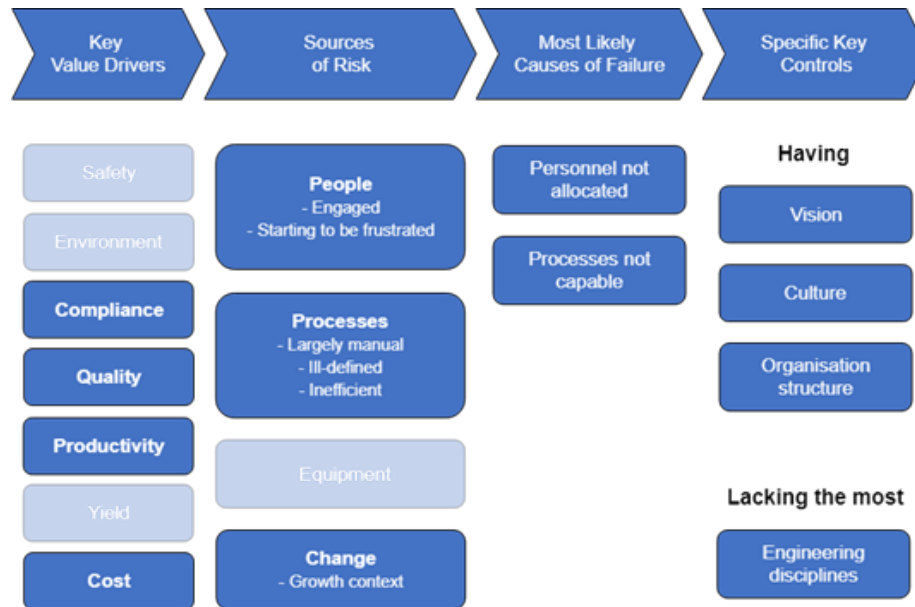

Figure 1: XYZ's integrated view.

An assessment of XYZ's key core processes highlighted the steps that do not bring value to the customers, and thus do not align with the company's purpose:

- XYZ calls the customers back after they register on the platform.
- XYZ sets up the list of required documents manually for each new customer.
- Multi-branch businesses call XYZ's support to upload their documents.

It appeared that the source of these pain points is the accumulation of work in the IT department, making this service the constraint (bottleneck) of the whole system.
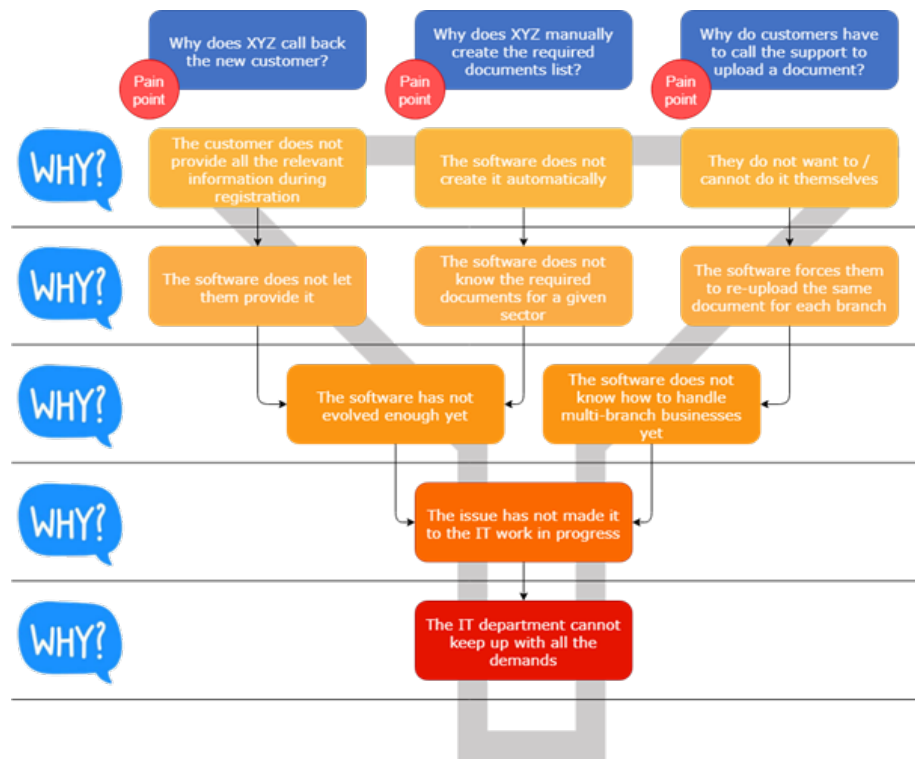
Figure 2: Pain points '5 whys' analysis.

Increasing the flow in this constraint is fit for purpose: it would enable the organization to meet demand by raising its overall efficiency. The root cause analysis of the IT department's limitations, in Figure 3, revealed that the underlying issues span the three dimensions of operational excellence. Addressing them would, by ripple effect, mitigate the symptoms and, ultimately, relieve the constraint.

Figure 3: Root cause analysis of the constraint's limitations. The red items are the root causes to address, the orange ones are only symptoms, and the green ones are causes that have no reason to change. Source of the top-right image: excelr8-mc.com.

Conclusions

Start-up mindset

The "start-up mindset" ("Move fast and break things") led the company this far (competitive advantage), but has become a barrier to its performance.

- Focusing on quick wins has made the system too complex to evolve, preventing XYZ from delivering value.
- This complexity absorbs resources, generating frustration among customers and employees.
- XYZ follows a documented pattern where a start-up cuts corners to 'cross the chasm'. The company's ability to strengthen its foundations (simplicity and business-aligned processes) is key to its future growth.

Engineering practices

The lack of engineering practices ('hacker' mindset) impedes XYZ's ability to manage complexity in this changing context.

- XYZ has treated software as a second-class citizen. Consequently, the IT department suffers from a lack of maturity: it is merely at the 'Analyze' stage of Bloom's taxonomy, while it should be at the top, as it is a core competency (see Appendix 1).
- XYZ does not prioritize its work, introducing variation in the system through context switching and unclear directions. This variability hinders the company's ability to provide customers with value consistently.
- These issues result from a broader absence of engineering practices, generating waste that distracts and prevents the company from aligning with its purpose.

Capacity

Increasing staff numbers is not the answer to support the scale-up at this stage. XYZ must first raise the flow in the constraint and smooth the overall workflow (see Appendix 2).

- Hiring more people now would add complexity (see Appendix 3) that the constraint is not yet ready to handle. As a result, it would reduce throughput (Brooks' law).
- The platform does not enable customers' autonomy, which pushes more work to the IT department and hinders its capacity to deliver long-term value (vicious circle).

Coordination

The company is in the middle of the Greiner model's 'control crisis', and its various parts need to coordinate for the business to pursue its growth (see Appendix 4).

- The business is validated and is now looking to take off. However, silos are still in place, impeding coordination within the company.
- The related communication issues, combined with the lack of prioritization, resulted in unrealistic customer expectations (both internal and external).
- The IT department (the constraint) should dictate the organization's rhythm. Instead, the rest of the system keeps pushing work, regardless of the actual throughput of the department.
- The current crisis is the most critical phase of XYZ's life as it is investment-intensive and could take the business back into survival mode if it fails.

Recommendations

To ensure value delivery during scale-up, XYZ should increase its IT department's throughput. 'Agile software' refers to a set of principles, resulting from applying operational excellence to the IT industry (see Appendix 5), that explains how to address this issue. Understanding these principles is a prerequisite for implementing the following recommendations effectively and efficiently.

Forming feature teams

The development teams should follow the 'two-pizza rule' (i.e. two pizzas should be enough to feed the entire group). The optimal size is around 5. Also, these teams should include people from other relevant departments (with in-depth business knowledge).

Expected effects

- Enhancing communication (breaking the **silos**)
- Reducing the feedback loop
- Simplifying interactions
- Improving the teams' autonomy
- Ensuring outcomes meet customers' needs

Allocating time for unplanned work

The development teams should allocate a fixed amount of time for unplanned work (e.g. 25% for urgent bugs and maintenance operations).

Expected effects

- Limiting unexpected context switching and interruptions

- Avoiding working at full capacity (where any new unplanned task automatically replaces an ongoing one)

Reducing work in progress

A dedicated team (the 'product' team) should:

- Filter all incoming requests (bugs, features, support requests)
- Push the most critical ones to the development teams
- Create a **prioritized backlog** ('to-do list') containing the other ones

Then, the development teams should:

- Handle the most critical requests as part of their pre-allocated 'unplanned-work' time
- Pull regular work from the backlog
- Focus on finishing the work in progress before starting a new task
- Release their work frequently (a feature not in the users' hands is still in progress)

Expected effects

- Reducing lead time
- Limiting work in progress ('start finishing, stop starting')
- Increasing reactivity

Applying engineering methods

Since the product team has a comprehensive view of all the system's documented issues, it should regularly perform reviews that include:

- Finding the issues' root causes (5 whys, root cause analysis)
- Determining the most frequent causes of problems (Pareto analysis)

Expected effects

- **Prioritizing** the work
- Fixing root causes (removing the '**start-up mindset**', see Table 3)
- Simplifying the system continuously
- Reducing waste (e.g. rework)
- Fostering technical excellence to make sure issues never reappear

Monitoring improvement

XYZ should rely on these metrics to follow up on the system's improvement after implementing the recommendations.

Customer dimension

- Autonomy Score: Number of support requests per month
- Effort Score: "How hard is it to use the platform?"
- Satisfaction Score: "How would you rate your overall experience with the platform?"
- Churn rate: Lost customers over a year/month

Staff

- Effort Score: "How hard is it to do your work?"
- Motivation Score: "How satisfying is your job?"
- Turnover: Lost employees over a year

System

- Lead time: The time between a task's beginning and delivery
- Release rate: Number of releases per month
- Defect rate: Number of bugs per month

Once the constraint is relieved, XYZ should reassess the system and plan for further improvements if required.

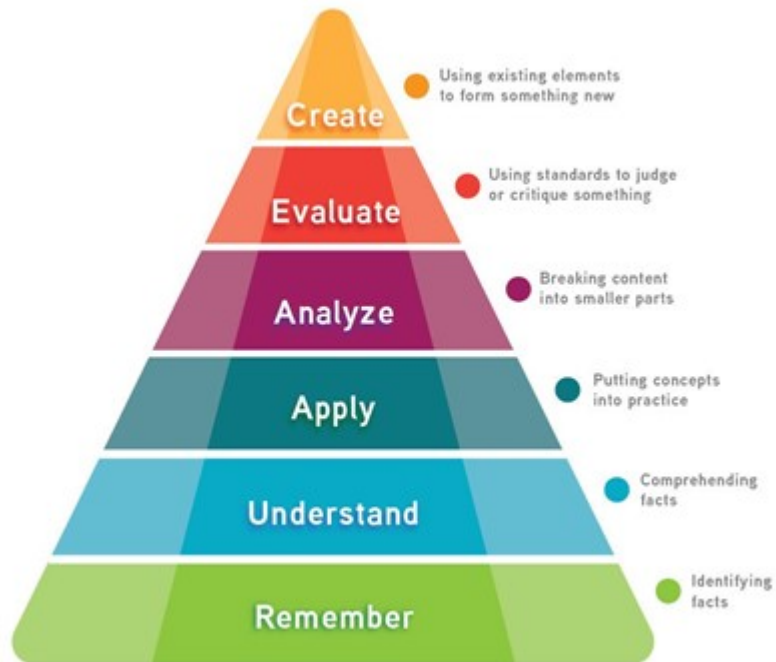# Appendices

Bloom's taxonomy

Figure 4: Bloom's taxonomy. Source: elearningindustry.com.

Steps to relieve a system's constraint

Figure 5: Theory of constraints continuous improvement cycle.
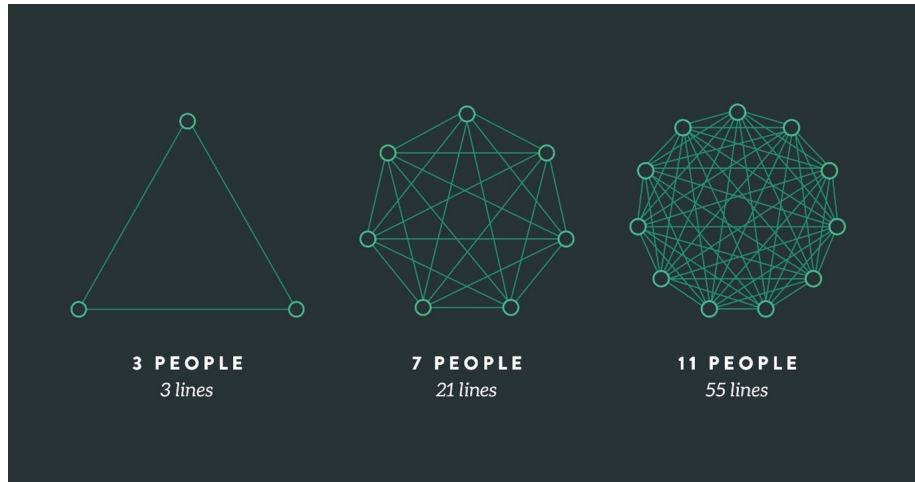
Lines of communication and team size

Figure 6: Communication overhead depending on the team size. Source: leadingagile.com.

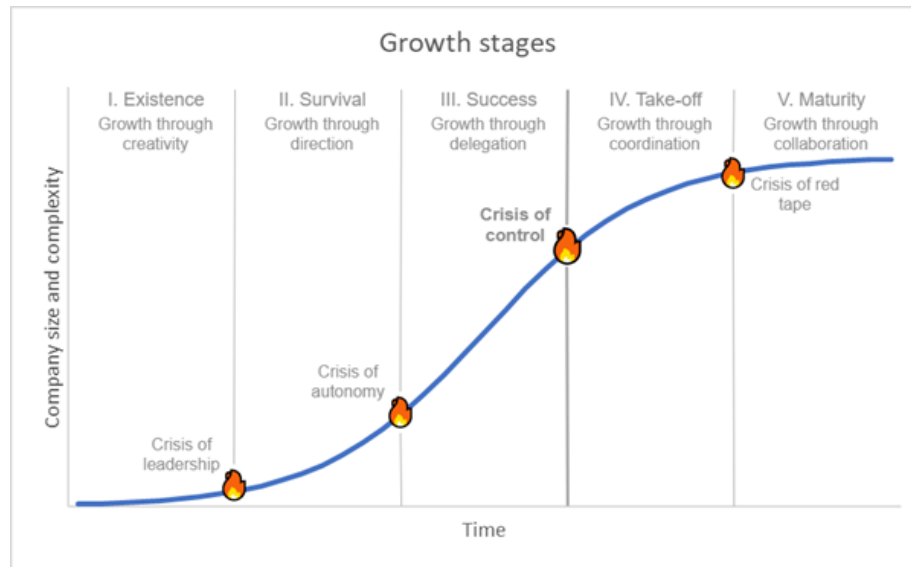**Growth stages of a small business**

Figure 7: Growth stages of a small business (Greiner's curve). Source: adapted from hbr.org.

Agile principles and operational excellence

Figure 8: Relationship between the Agile software principles, the Operational Excellence Management System (OEMS) elements and XYZ's value drivers. Source: adapted from wilsonperumal.com.

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