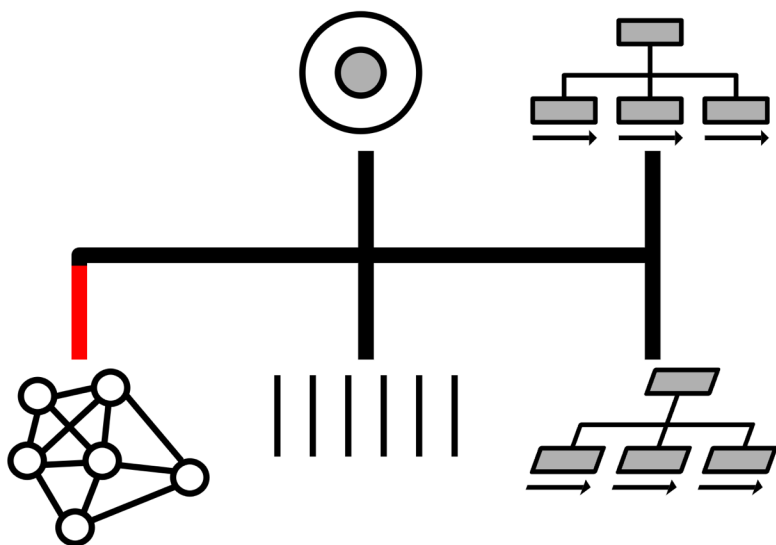


# The Agile Gearbox

The Incredible Power  
of Switching to Manual



Olivier Gourment

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## The Incredible Power of Switching to Manual

Olivier Gourment

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## 0.1 A Special Note from the Author

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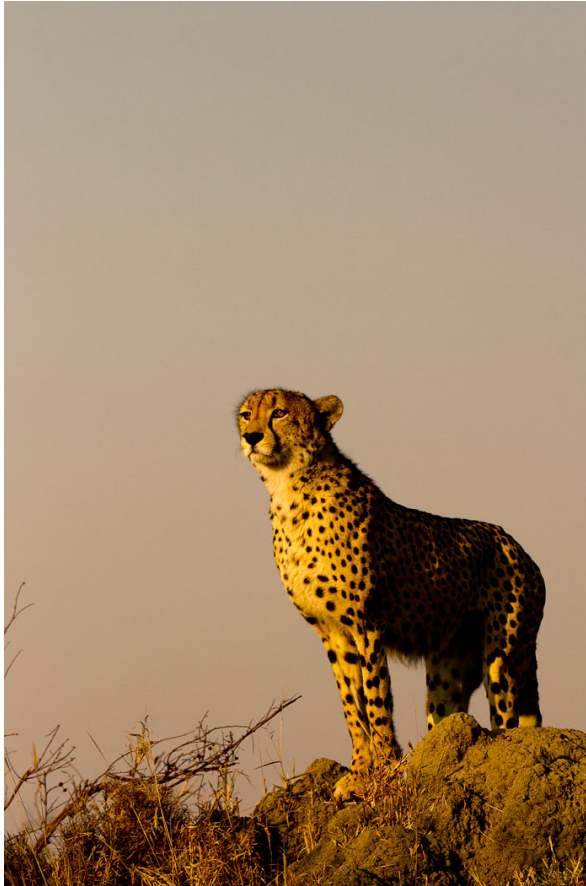
# Introduction

In January 2021, Elon Musk composed five words and tapped the Tweet button<sup>1</sup>. Fast forward five months to a sunny afternoon in June, an experienced automotive test driver slides into the driver's seat of an incredible machine, ready to challenge the limits of automotive physics.

A seasoned professional at testing car speeds for MotorTrend magazine, he knows this time will be anything but routine. He's about to test the Tesla Model S Plaid "Palladium." With the car in "Drive" and at a complete stop, he firmly presses the brake pedal with his left foot and fully depresses the accelerator. The front suspension lowers, adopting the "cheetah stance"<sup>2</sup>.

As the final "launch control ready" message appears, he releases the brake. In that breathtaking moment, the Plaid surges forward, and he realizes two things. First, as his surroundings blur into a dizzying whirl of shapes and colors, he should have pressed his head firmly against the headrest. Second, he's sitting in the first car to accelerate from 0 to 60 mph in under 2 seconds<sup>3</sup>.

While the car's commercial success seems bright, the future of the actual cheetah remains uncertain. The species is endangered, with fewer than 10,000 adults living in the wild today<sup>4</sup>. This striking contrast between technological prowess and nature's fragility underscores the importance of accelerating innovation to preserve our biodiversity and climate.



*A cheetah*

The key to solving our pressing challenges might lie in Musk's tweet from January 2021: "the factory is the product." This straightforward declaration has far-reaching implications for creativity and the future of our planet. While Tesla's cars are undeniably innovative, and the company is recognized as the leading innovator in the automotive industry<sup>5</sup>, one wonders whether the focus on ingenuity in the factory can create a multiplier effect on the inventive capabilities of the end products.

## Tesla, an inspiration?

Not everyone is a fan of Tesla, and opinions can quickly become polarized. With this company, for example, it's vital to question whether innovation should compromise wellbeing—an issue difficult to assess due to non-disclosure agreements<sup>6</sup>. Our world does face ecological challenges but also, equally importantly, significant ethical issues. Good working conditions shouldn't be sacrificed for innovation. In fact, research shows that meeting human needs and fostering safe environments are essential for creativity. Only in such circumstances can people generate novel ideas that may initially seem absurd but ultimately lead to breakthroughs and incremental improvements over time. Therefore, we invite you to momentarily forget what you know about “best practices” or famous people or brands and concentrate on the observations, thought experiments, and ideas presented here that encourage both innovation and sustainability.

Can we learn something from the innovations that generate innovations—those within the factory— and accelerate progress to address the critical issues facing our world today?

To answer this question, the first step will be to suspend judgment. The research behind this paper has been shaped by years of first-hand coaching and observation of organizations of varying sizes across diverse industries, as well as engaging with and learning from numerous experts in different fields of expertise. This article is the culmination of years of work on organizational design, integrating both field tested models and very recent discoveries. It serves as an invitation for everyone working in organizations to consider the potential of a brand new and fascinating way of looking at organizational agility.



## Notes

- 1 Elon Musk. Twitter Post. 2021. <https://twitter.com/elonmusk/status/1348716679774265344>.
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# **Part I. Agility: Present Illusions**

# 1 The Enduring Pursuit of Organizational Agility

Organizations are really thirsty for agility in an era of increasing volatility, but at the same time, their quest is often failing.

Even as experts grapple with defining Organizational Agility, they unanimously acknowledge an intriguing paradox: it is as highly desirable as it is challenging to achieve.

## 1.1 Understanding Organizational Agility

The concept of Organizational Agility is akin to an elusive chameleon, changing hues depending on the observer's perspective, leaving many in pursuit of its true essence. If we take the lens of the collaborative encyclopedia, Wikipedia, Organizational Agility emerges as a dance, deftly twirling to the rhythm of market and environmental changes<sup>1</sup>. Aaron De Smet, a beacon at McKinsey, likens it to a phoenix, with the ability to renew, adapt, change quickly, and thrive amidst the whirlwinds of a turbulent environment<sup>2</sup>.

The Business Agility Institute imagines it as a lighthouse guiding a ship, enabling a business to deliver value in the stormy seas of Volatility, Uncertainty, Complexity, and Ambiguity<sup>3</sup>. Scaled Agile paints the picture of a deft tightrope walker, competing and thriving by quickly responding to the shifting winds of market changes and emerging opportunities<sup>4</sup>.

David J. Anderson School of Management, on the other hand, envisions it as an agile mountain climber, adapting to the external and internal terrain changes, rapidly meeting customer demands and expectations<sup>5</sup>. But the hunt for a definitive definition continues, weaving through a thick jungle of metaphors, as we strive to grasp the full essence of this chameleon-like concept.

## 1.2 The Allure of Organizational Agility

According to a study by McKinsey, an agile transformation can catalyze significant benefits for organizations<sup>6</sup>. The analysis of 22 organizations across six sectors identified three key outcomes of such transformations: enhanced employee engagement, improved customer satisfaction, and operational performance. These mutually reinforcing benefits culminate in a fourth outcome: improved financial performance. Indeed, truly agile firms stand a greater chance (55%) of achieving top-quartile financial performance than the average organization (25%).

This powerful allure of organizational agility is further evidenced by 3M's R&D team. With an agile mindset, they managed to accelerate their product development timeline dramatically, delivering new products in weeks instead of years, as illustrated in their solar roof case study<sup>7</sup>.

However, the journey to agility comes at a time of worrying trends in the business world. In 2022, a scant 32% of full-time and part-time employees claimed to be engaged at work, while over 15% admitted to active disengagement<sup>8</sup>. Given this backdrop, the potential of agile transformations to reinvigorate employee engagement becomes even more enticing.

Indeed, a striking “67% of CEOs” concur that agility has become the new currency of the business world – a sluggish pace could

spell bankruptcy (KPMG’s 2019 report, “Agile or Irrelevant”<sup>9</sup>). Moreover, “92% of C-level executives believe organizational agility is critical to business success”<sup>10</sup>. With such tempting benefits on the table, it’s hardly surprising that organizations are gravitating towards agility.

## 1.3 The Challenge of Achieving Organizational Agility

While the advantages of organizational agility are clear, the journey towards it can be fraught with difficulties. A 2018 Forbes Insights report titled “The Elusive Agile Enterprise” found that merely 18% of executives surveyed believed their organization was highly effective at implementing agile practices<sup>11</sup>. Consistent and reliable data on the subject is scarce, but in 2020, Dr. Jeff Sutherland, the co-creator of Scrum<sup>12</sup> —the most widely adopted agile method<sup>13</sup>—, estimated that the success rate of agile transformations can dip to as low as 47%<sup>14</sup>. The McKinsey study presents an even more sobering statistic for banks, with the success rate standing at 30%<sup>15</sup>.

The specific challenges and failure modes of agile transformations will be explored further in [Incrementally](#).

## 1.4 Chapter Summary



Before moving on to the next chapter, let's take a moment to review and reinforce what we've covered. Below you'll find a chapter summary with some key words removed. To assess your grasp of the material, try filling in the blanks. You should find this interactive exercise to be a smooth way to test and consolidate your knowledge of the concepts discussed.

Organizational A\_\_\_\_\_ <sup>a</sup>, though highly desirable, can be elusive to define and challenging to achieve. In the quest for this agility, businesses face numerous complexities and o\_\_\_\_\_ <sup>b</sup>. The understanding of Organizational Agility can be nuanced and varies, but common themes include adaptability and swift responsiveness to c\_\_\_\_\_ <sup>c</sup>. Recognized as a crucial factor in business success, Organizational Agility can bring numerous benefits such as enhanced productivity, amplified employee e\_\_\_\_\_ <sup>d</sup>, and superior financial outcomes. However, actualizing Organizational Agility can be a major challenge, with a low success rate in the implementation of agile practices and transformations.



Done with your guesses? You'll find answers on the next page. Remember, this exercise isn't a one-time thing. Feel free to return at a later date to refresh your memory and deepen your understanding of the concepts.

<sup>a</sup>: Agility <sup>b</sup>: Obstacles <sup>c</sup>: Change <sup>d</sup>: Engagement

## Notes

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- 15 McKinsey & Company. “Why Most Digital Banking Transformations Fail, and How to Flip the Odds”. 2023. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/tech-forward/why-most-digital-banking-transformations-fail-and-how-to-flip-the-odds>.



## **2 Pitfalls of Persistent Organizational Transformations**

Gartner's revelation that a staggering 85% of organizations have restructured in recent years<sup>1</sup> should give one pause. These transformations, agile included, hold the promise of metamorphosis. But what happens when the cocoon cracks prematurely?

The pursuit of organizational agility can be a race car streaking towards the finish line. But when the engine sputters, transformations falter and an array of maladies can ensue: breached trust, depletion of social capital, burgeoning change fatigue and cynicism, and detriments to talent attraction and retention.

### **2.1 Breached Trust**

The mechanistic worldview held by many leaders, as articulated by Dr. Gareth Morgan in "Images of Organization"<sup>2</sup>, results in a perception of organizations as well-oiled machines, amenable to manipulation. However, this viewpoint neglects the intangible and intricate web of relationships, networks, and ideas that truly compose an organization. Disruptions caused by agile transformations premised on this flawed assumption can unsettle this complex ecosystem, akin to an oil spill marring a vibrant coral reef.

## 2.2 Depletion of Social Capital

In the aftermath of botched agile transformations, one often observes the erosion of social capital, especially among the leadership ranks. Much like a storm uproots the flora and fauna, thus disturbing the harmony of an ecosystem, these transformations disrupt established networks and structures. This not only impedes subsequent change initiatives but also endangers the organization's intrinsic ability to create value. The erosion of this "social soil" thus fundamentally weakens the organization, making subsequent transformations as daunting as navigating through storm-ravaged landscapes<sup>3</sup>.

## 2.3 Escalating Change Fatigue and Cynicism

The truncated or abandoned agile transformations can be akin to a pilot announcing landing only for the plane to take off again. This loop of unfulfilled promises and relentless change initiatives can drain the enthusiasm from employees and leaders alike. Corporate narratives of utopia, when found wanting, can breed cynicism. Furthermore, the perpetual test-and-learn modus operandi of agile transformations can create a lingering sense of unfinished business, fanning the flames of cynicism. Why does this elicit cynicism? It's like asking a juggler to balance a sword while juggling balls. Efficiency and cost-cutting mandate the balance, while creativity demands the juggle. As elucidated by Lindsay McGregor and Neel Doshi in "Primed to Perform"<sup>4</sup>, these contradictory demands stem from incompatible motivational systems: tactical performance versus adaptive performance.

## **2.4 Detriments to Talent Attraction and Retention**

In an era where a new generation of workers seeks fulfillment from their work, bungled agile transformations risk impairing organizations' ability to attract and retain talent. Several worrying trends mark the employment landscape:

- The rise in “quiet-quitting”<sup>5</sup>
- Pushbacks against mandatory Return To Office policies<sup>6</sup>
- Struggles to attract and retain talent demanding a balanced, mentally nurturing work environment<sup>7 8</sup>

These trends underscore the growing internal risks for companies and illuminate the critical need to circumnavigate the pitfalls of failed agile transformations.

## 2.5 Chapter Summary

The promise of organizational agility can often resemble a \_\_\_\_ - \_\_\_\_<sup>a</sup> streaking towards the finish line. Yet, when transformations falter, a range of problems can arise: trust can be \_\_\_\_\_<sup>b</sup>, social capital - the “social soil” vital for \_\_\_\_\_<sup>c</sup> growth - can be depleted, and change fatigue and cynicism can \_\_\_\_\_<sup>d</sup>, leading to challenges in talent attraction and retention.

Often, leaders perceive organizations as \_\_\_\_\_<sup>e</sup>, neglecting the intangible web of relationships that form the organization’s essence. Failed agile transformations can disrupt this complex \_\_\_\_\_<sup>f</sup>, akin to an oil spill damaging a vibrant coral reef. The ensuing erosion of the “social soil” not only disturbs established structures but also compromises the organization’s intrinsic ability to \_\_\_\_\_<sup>g</sup> value.

Moreover, perpetual cycles of transformation can breed cynicism and change fatigue, much like a plane’s constant \_\_\_\_\_<sup>h</sup> and landings without ever reaching a destination. This impacts the organization’s ability to attract and retain talent in an era where fulfillment at work is increasingly sought after. This highlights the need to carefully navigate the treacherous terrains of agile transformations to avoid these \_\_\_\_\_<sup>i</sup>.



Answers are on the next page. Revisit this section anytime to reinforce your understanding!

<sup>a</sup>: Race car <sup>b</sup>: Breached <sup>c</sup>: Organizational <sup>d</sup>: Escalate <sup>e</sup>: Machines <sup>f</sup>:  
Ecosystem <sup>g</sup>: Create <sup>h</sup>: Takeoffs <sup>i</sup>: Pitfalls

## Notes

- 1 Gartner. “Foundations of Organization Design Part 1: Key Concepts and Relationships”. 2019. <https://www.gartner.com/en/documents/3936828/foundations-of-organization-design-part-1-key-concepts-a>.
- 2 Morgan, Gareth. *Images of Organization*. Sage Publications, 2006.
- 3 Forbes Human Resources Council. “Why Transformations Fail And What You Can Do About It”. Forbes, 2021. <https://www.forbes.com/sites/forbeshumanresourcecouncil/2021/03/02/why-transformations-fail-and-what-you-can-do-about-it/>.
- 4 McGregor, Lindsay, and Doshi, Neel. “There Are Two Types of Performance — but Most Organizations Only Focus on One”. *Harvard Business Review*, 2017. <https://hbr.org/2017/10/there-are-two-types-of-performance-but-most-organizations-only-focus-on-one>.
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# 3 Obstacles on the Road to Agile Transformations

Agile transformations are not without their tribulations. As organizations navigate the intricate process, an incomplete understanding and application of Agile methods often lead to adverse effects. However, it's crucial to understand that these issues do not denote an inherent flaw in Agile methods. Instead, they underscore the vital need for a thoughtful, comprehensive approach to implementing Agile transformations.

## 3.1 Caught in the Team Level Conundrum

Agile methods are meticulously delineated at the team level, be it Scrum, eXtreme Programming<sup>1</sup>, Kanban<sup>2</sup>, and so forth. Many organizations embark on their Agile journey by incubating a handful of Agile teams, subsequently spreading the transformation to envelop as many teams as possible. But, does that suffice to attain true organizational agility?

- Traditional annual budget cycles might engross a team's capacity for an entire year, impeding the capacity to adapt to volatile market conditions<sup>3</sup>.
- Teams might find themselves embroiled in intricate interdependencies, such as a frontend development team lying in wait for a backend service for testing.

Consider this intriguing case study. Agile coach and author Klaus Leopold conducted an examination of an organization that

transitioned to Agile and established 600 Agile teams. Surprisingly, he discovered that despite the transformation, the Time to Market metric remained unchanged. Teams were interminably waiting on each other. His key takeaway? “Agile teams have nothing to do with business agility.”<sup>4</sup>

Misinterpretations and misuse of Agile techniques can further impede the transformation:

- Daily scrum meetings devolve into status report sessions for project managers<sup>5</sup>.
- Team Velocity metrics get manipulated or misused for team comparison, blame assignment, or coercion<sup>6</sup>.
- Automated unit tests that fail to facilitate code alterations, usually resulting from tests written post coding<sup>7</sup>.
- Teams clinging to their old workflows under the guise of new Agile terms, like replacing ‘requirements’ with ‘user stories’ without altering the format or workflow<sup>8</sup>.

## 3.2 Confined to the IT Realm

The term “Agile” originated within the realms of project management and software development, thanks to the authors of the Agile Manifesto<sup>9</sup>. Initially, Agile methods found application solely within these confines. But when Agile transformations remain constrained to the IT department, a slew of challenges for the entire organization can arise.

Dave West, CEO and Product Owner at Scrum.org, coined the term “water-scrum-fall”<sup>10</sup> to illustrate why many organizations fail to exploit the full potential of Agile methods: Agile is only incorporated during the development phase of projects. The model begins with a “Big Design Up Front”<sup>11</sup>, followed by iterative development on project *bites* that suit an Agile team’s capacity, and ends with

integration testing and deployment. This linear approach creates substantial wastage, as most of these project *bites* are not of high priority, and thus many teams toil on low-impact tasks. Moreover, these *bites* often fail to integrate seamlessly, resulting in substantial rework.

Examples of other hurdles include:

- Misalignment of IT and business goals leading to confusion around priorities and objectives.
- Decision-making bottlenecks and delays in the IT department awaiting non-Agile departments' approvals.
- Limited understanding of customer needs outside the IT department.
- Resistance to change due to a divide between Agile and non-Agile departments.
- Hindered cross-functional collaboration leading to restricted innovation and adaptability.

To counter these challenges, the solution is clear: Agile transformations must permeate the entire organization. Only such an inclusive approach should lead to true “Agile @ Scale”, a concept we delve into next.

### 3.3 “Agile @ Scale”

The 2000s marked the adoption of agile at the team level, while the 2010s saw the rise of scaled agile. Numerous frameworks and methods were devised to bridge the perceived gap between agile methods suitable for smaller teams and those required at the organizational level. Many products necessitate the collaborative efforts of hundreds of people. So, how do we extend agile methodologies to accommodate such a scale?



To address this, various methods and frameworks were introduced, including:

- Disciplined Agile<sup>12</sup>
- Large-Scale Scrum (LeSS) Framework<sup>13</sup>
- Nexus<sup>14</sup>
- Scaled Agile Framework (SAFe)<sup>15</sup>
- Scrum@Scale<sup>16</sup>
- Spotify-inspired<sup>17</sup>

The term “scale” here refers to the number of people contributing to a product or suite of products. It often implies exceeding the “Dunbar number” of 150, considered the maximum number of people one can maintain meaningful interactions with<sup>18</sup>.

Most of these frameworks suggest that scaling relies on the coordination of agile teams. This concept aligns with retired US Army General Stanley McChrystal’s book, “Team of Teams”<sup>19</sup>, which resonated with many agile practitioners.

Some frameworks like Nexus and LeSS place an emphasis on ‘descaling’ instead of scaling. Nexus, established in 2018, with a 2021 addendum, advises that “While often counterintuitive, scaling the value that is delivered does not always require adding more people. Increasing the number of people and the size of a product increases complexity and dependencies, the need for collaboration, and the number of communication pathways involved in making decisions. Scaling-down, reducing the number of people who work on something, can be an important practice in delivering more value<sup>20</sup>”.

Similarly, Craig Larman, co-author of the LeSS Framework, states it’s not about scaling. Instead, he says, it’s about “descaling and simplification of the limiting organizational structures”<sup>21</sup>.

On the other hand, the Scaled Agile Framework for enterprises (SAFe<sup>22</sup>) explicitly accommodates existing hierarchical structures

by embracing John P. Kotter's "Dual Operating System"<sup>23</sup>. However, this approach has faced criticism. Kurt Bittner argues that "organizational hierarchy gets in the way of agile response"<sup>24</sup> in two ways: 1. It normalizes delays, and "waiting is death for agile teams" 2. It rejects transparency as soon as this one "makes someone look bad".

SAFe incorporates principles from Donald G. Reinertsen's "The Principles of Product Development Flow"<sup>25</sup>, a highly respected work in the agile community. However, the framework itself has attracted critics. Sean Dexter, Sr Product Designer at Meta, suggests that "SAFe enables bureaucratic, top-down control," and is oriented around "volume, not value"<sup>26</sup>. Furthermore, until version 5 (February 2023, precisely), one of the four core values of the framework was "Program Execution"<sup>27</sup>, a concept that raises questions within the agile community. For example, if a large program estimated to take one year undergoes conditions three months into it that invalidate its business case, should we still value its execution?

In our quest for answers, it's worth noting a dedicated website<sup>28</sup> that scrutinizes SAFe. Hosting critiques from Agile Manifesto's original authors and industry luminaries, it furnishes a medley of viewpoints and case studies, painting a picture of organizations grappling with agile transformations. Such accounts evoke deep introspection: are the pitfalls truly inherent to the frameworks, or are they a byproduct of flawed application, exacerbated by their increasing popularity? And, when reflecting on the agility of a group of cheetahs, is there an upper limit?

And, in fact, is it possible that to answer the scaling question, we need to close and reopen our eyes in an attempt to look at agility differently: is it possible that our aptitude to recognize and truly comprehend what agility is itself the issue? How to observe agility? It's the question we explore next.

## 3.4 Chapter Summary

Navigating the path to a successful Agile transformation presents potential challenges, including the \_\_\_\_\_<sup>a</sup> and misuse of Agile techniques. Common stumbling blocks include traditional budgeting practices and inter-team \_\_\_\_\_<sup>b</sup>.

If Agile practices are confined to the \_\_\_<sup>c</sup> department, this can lead to alignment issues, decision-making bottlenecks, and resistance to change. A comprehensive organizational approach is required for successful Agile transformation.

The concept of “Agile @ Scale” is presented as a means to implement Agile practices at larger scales and organizational levels. These scaling models offer numerous benefits, but also come with potential \_\_\_\_\_<sup>d</sup>. The real challenge in Agile transformations might not lie in the frameworks or methods, but in the understanding and effective application of \_\_\_\_\_<sup>e</sup>.

<sup>a</sup>: Misinterpretation <sup>b</sup>: Dependencies <sup>c</sup>: IT <sup>d</sup>: Pitfalls <sup>e</sup>: Agility

## Notes

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# 4 Pinning down Agility: An Observer's Quandary

So, how do organizations figure out if they're heading in the right direction?

We already introduced a number of Agile methods in [Agile @ Scale](#), but Agile is now really a vast and diverse ecosystem, as enumerated by Craig Smith in his “40 Agile methods in 40 minutes” talk<sup>1</sup>. Scaling Agile principles across an organization can swiftly become a complex task. Navigating this landscape to determine adherence or compliance quickly transforms into a daunting endeavor.

In the realm of Organizational Agility, “Are we there yet?” morphs into a bit of a brain-teaser. Amid such a cacophony of competing methods, frameworks, and management theories, each vying for the title of “the ultimate guide,” forging a consensus on what agility should resemble is nothing short of Herculean.

Even charting the progress becomes a tightrope walk. Suppose you're tracking speed. In that case, you need to ascertain whether your organization is churning out new products or wrapping up projects more swiftly. This task demands ample data to spot a trend. And given the unique nature of each project, it takes a while to amass a sample size sizable enough to test for statistical significance.

Several facets of agility remain elusive, stubbornly resisting easy observation. To shed light on this, let's whisk ourselves back to the animal kingdom:

1. Picture an agile cheetah – a speed demon capable of swift direction changes. However, after an average minute-long

chase, our feline friend requires 5 to 55 minutes of rest. Is it *agile* during these lulls? At a glance, perhaps not. But these respites are crucial for the cheetah to maintain its agility.

2. Pack hunting might be a closer analog to organizational agility. After a successful hunt by a pack of gray wolves, how do we gauge if they could've been quicker or nabbed more prey? Is there a definitive, objective yardstick for agility?
3. Suppose a wolf falls during an otherwise triumphant hunt. Can we still tag the pack as agile? That is, if it entails excessive risks, can it truly be deemed agile?
4. If we concoct a training regimen for hyenas, supposedly making another species or another pack of relatively less agile hyenas more agile, how sure are we that those same steps will pay off in an entirely different context?
5. Hunts can span hours or even days. If our observations of agility are confined to outcomes, outputs, or actions, we risk overlooking other valuable indicators that might foretell agility, leading us to more tangible ways of fostering agile behaviors.

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For those executives subscribing to the idea that management hinges on measurement, selecting apt metrics is of the essence. Nevertheless, metrics predicated on compliance (sticking to specified agile practices) often miss the mark. Why do measures rooted in adherence to recognized agile practices or techniques prove elusive or even deceptive?

Consider an agility-agnostic business scenario: gauging the Net Promoter Score (a robust metric for customer satisfaction<sup>2</sup>) post a customer interaction. If the agent is skeptical about the survey's systematic nature, indifferent, or dreads negative feedback, they might only remind the customer about the survey when they feel



the interaction went swimmingly. This, needless to say, defeats the metric's purpose.

Analogous scenarios can play out with agile techniques. Manipulating code quality metrics, productivity metrics (estimation, velocity), being less than forthright during daily meetings, or withholding information at retrospectives can all result in perfect compliance devoid of any tangible benefits. We will delve deeper into the murky waters of "fake agile" in [Context and Culture: The Tailwind of Agility](#).

## 4.1 Chapter Summary

Navigating the diverse Agile ecosystem to determine organizational trajectory can be complex and challenging. Establishing consensus on what \_\_\_\_\_<sup>a</sup> should resemble is difficult due to the abundance of competing methods, frameworks, and theories. Tracking progress demands extensive \_\_\_\_\_<sup>b</sup> and significant samples, adding another layer of complexity.

Agility, inherently multifaceted, often defies simple \_\_\_\_\_<sup>c</sup> or measurement. The animal kingdom illustrates that assessing agility requires considering factors such as wellbeing, risk levels, and \_\_\_\_\_<sup>d</sup>-specific strategies.

Executives must carefully choose metrics to avoid deceptive \_\_\_\_\_<sup>e</sup>-based measures. Instances of manipulating data for appearing Agile compliant highlight the need to understand and embody true agility, rather than simply following defined \_\_\_\_\_<sup>f</sup>.



Answers are on the next page. To reinforce your understanding, consider revisiting this chapter summary exercise anytime.

<sup>a</sup>: Agility <sup>b</sup>: Data <sup>c</sup>: Observation <sup>d</sup>: Context <sup>e</sup>: Compliance <sup>f</sup>:  
Practices



## Reflective Questions

Before you move forward, take a moment to connect the concepts discussed in this section to your own experience.

1. What might render a trio of cheetahs more agile than a solitary one?
2. How do the [five animal metaphors](#) resonate in your context? Can you draw parallels to situations in your organization or project experiences?
3. Are you monitoring adherence to Agile practices? How does it tally with agility?
4. Can you think of leading indicators that might have served as barometers of the project's agility health?

## Notes

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## 5 Agility: Practices or a Cultural Shift?

Through our zoological expedition, we've established that agility is anything but simple. It follows that its elusive nature might render it a herculean feat to grasp, especially for those who've yet to encounter or internalize it. This poses a head-scratcher for the executives tasked with its propagation: how do you "install" agility when it's a tall order to even gauge if you're making headway in its adoption, or if the observed progress is merely superficial or even a figment of your imagination?

A significant number of organizations striving for agility lean heavily on methods and practices (often driven by industry pressures to standardize and industrialize). These form the bedrock of Agile training pitches promising to impart agility in two days (or even less!). There's a prevailing notion that the mere adoption of these practices will trigger a paradigm shift in the mindset of managers and employees, thereby firmly embedding agility in the organization. Yet, absent a conducive milieu that bolsters these newfound behaviors, the change teeters precariously. Especially under duress or after the coaches have packed up, it's all too easy to lapse back into the comfort of established ways.

Could it be time to "switch to manual", where training segues into coaching on adherence to practices? The spotlight on what's easily mutable has eclipsed the cultural prerequisites alluded to in Agile literature (courage, openness in Scrum, for instance—read more in [The Birth of a Micro Culture](#) and [Unearthing the Project Pioneer](#)). This will be the focal point of the ensuing chapter, where we'll delve into a fresh viewpoint on comprehending and observing agility—one that prioritizes context as a precursor to determining which

mindsets and behaviors to espouse. We'll also touch upon the intriguing prospect of culture quantification, potentially offering a more lucid snapshot of an organization's position relative to its journey towards Organizational Agility.

Are you geared up to entertain the idea of switching to manual?



## Reflective Questions

1. **From [The Enduring Pursuit of Organizational Agility](#):** What aspects of agility do you find most desirable for your organization? Why do you think it is elusive?
2. **From [Pitfalls of Persistent Organizational Transformations](#):** Can you relate to any of the pitfalls of organizational agility mentioned in the section? How has your organization responded to these challenges?
3. **From [Obstacles on the Road to Agile Transformations](#):** Reflect on any attempts at Agile transformation your organization has undertaken. What went well and what could have been improved? How did the outcome tally with the potential reasons for failure discussed in this section?
4. How do you perceive the culture of agility in your organization? Do you find your answer depends on which part of the organization you're considering? You're ready for Part II!

If you'd like to discuss your responses, delve deeper into these topics, or simply engage in conversation about Agile transformation, feel free to reach out to the author at [olivierg@agile-u.com](mailto:olivierg@agile-u.com). I would be delighted to hear your thoughts and experiences!

## Notes

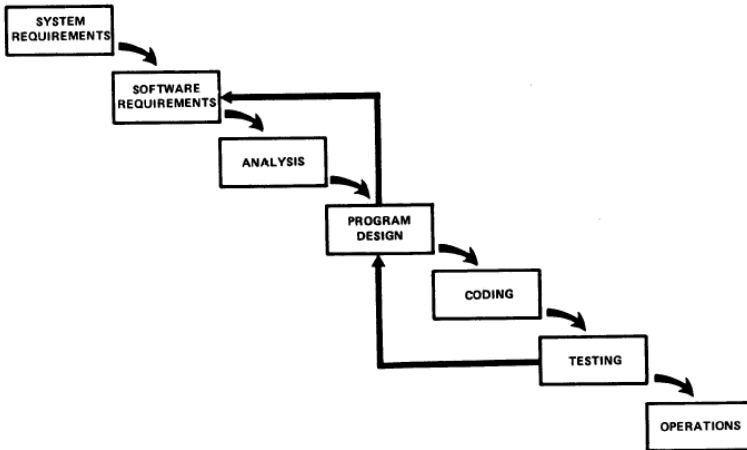
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# **Part II. Agility: Deconstructed**

This content is not available in the sample book. The book can be purchased on Leanpub at <http://leanpub.com/agile-gearbox>

# 6 Comparing Agile Apples...

## 6.1 The Birth of a Micro Culture...



*Royce's model*

The Agile Manifesto for software development<sup>1</sup>, penned in 2001 by seasoned software developers, is often seen as the inception of Agile. It emerged as a counter to the industry's love affair with the "waterfall method". This method, represented as a waterfall-like image in Winston Royce's influential 1970 article, outlined seven immutable steps of software development<sup>2</sup>.

Despite Royce's attempts to dam the waterfall, cautioning that implementing this model without iterations "is risky and invites failure"<sup>3</sup>, the software industry donned its bathing suits and dove headfirst into these alluringly predictable waters. His warning

turned out to be as effective as using an umbrella against the Niagara Falls, failing to dampen the industry's enthusiasm for this seemingly structured and manageable method.

This method birthed an inundation of documentation and stage gates, giving project managers copious metrics to monitor and vendors the opportunity to concoct and peddle intricate, expensive, and dense checklists. Yet, this wave of documentation drowned any hope of success for projects that could not adhere rigidly to a predefined plan. It simply did not work for the nuanced reality of software development.

In response to this deluge, a group of 12 software developers decided to swim against the current, challenging these “heavy-weight” practices. Their Agile Manifesto wasn't just a blueprint for organizational transformation, but a depiction of a nascent micro-culture emerging within complex and innovative software projects<sup>4</sup>.

This micro-culture, embodied by the Agile Manifesto, set a course away from the roaring falls of rigid processes towards calmer waters of human-centric collaboration. The first preference stated in the Manifesto, “individuals and interactions over processes and tools,” set the tone for this journey. So, while the industry was busy wrestling with the deluge of waterfall's failings, the authors of the Agile Manifesto charted a course towards a more sustainable future, powered by their own diverse experiences.

## **6.2 ...Tailor-made for Software Projects...**

Agile methods first made their mark within software projects and innovation-driven organizations such as Chrysler C3<sup>5</sup>, Object Technology International<sup>6</sup>, Easel Corporation<sup>7</sup>, GE Medical (formerly IDX)<sup>8</sup>, and Fidelity Investments<sup>9</sup>, among others. What is



the secret to their success? The intuitive answer might be careful planning and stringent design, but the reality is somewhat more surprising.

In a brilliant TED Talk, Tom Wujec, a Fellow at Autodesk at the time, shared valuable lessons from the “marshmallow challenge”<sup>10</sup>. This challenge looks deceptively simple: teams of four are tasked with building the tallest free-standing structure they can using 20 sticks of spaghetti, one yard of tape, one yard of string, and a marshmallow that has to sit at the very top.

As with any building construction project, you might assume the teams who planned the most would excel in this challenge. However, the reality was starkly different. The teams that jumped right into the task, built immediate prototypes, and iterated on their design were the ones who excelled. In fact, kindergarten graduates consistently outperformed business school graduates because they started prototyping immediately and kept the main goal—the marshmallow—at the top of their structures throughout the process.

This learning-while-building approach is fundamental to Agile. It’s about immersing oneself directly in the task at hand, experimenting, failing, and then learning from those failures. It is this perspective that leads Wujec to assert that “design truly is a contact sport”.

However, in software projects, the feedback loops aren’t as instant or visible as with a spaghetti tower, which can be readily seen by the team wobbling or collapsing. Complex software projects, particularly those integrating multiple systems and players, involve specialists who must interpret their immediate environment and swiftly relay pertinent information to their teammates. In fact, the unpredictable nature of these projects means that challenges can arise from anywhere: customers might change their preferences after viewing an early prototype, engineers might encounter difficulties with existing interfaces or data, new components might

need to be integrated, or the team might grapple with immature technologies. This “contact sport” in software requires team members to proactively gather and share information to create effective feedback loops. It is this ability to swiftly and effectively respond to such challenges that forms the essence of Agile, making it a superior approach to meticulous upfront planning.

So effective is this approach that Agile methodologies have extended their reach far beyond their software origins, finding application in diverse fields such as hardware development, as exemplified by Wikispeed<sup>11</sup>, and marketing<sup>12</sup>, among others. The broad adoption of Agile principles across various sectors in today’s fast-paced and complex business environment bears testament to their universal applicability and enduring value.

## **6.3 ...That Is Now Prevalent. Is It, Though?**

Building upon the discussion from Chapter 1, Agile methods have indeed gained significant traction, but it’s essential to note that their mere adoption does not make an organization agile. The authors of the Agile Manifesto had originally considered describing their approach as “lightweight” to signify their intent of shedding extraneous complexity. They ultimately adopted the term “Agile,” a label far more appealing and fitting for their ethos<sup>13</sup>. Ironically, the allure of this term has led to its widespread adoption, even by organizations that have not truly embraced the core tenets of Agile, masking their resistance to genuine transformation. For instance, let’s consider Scrum, the poster-child of Agile methods, whose guide spans a mere dozen pages<sup>14</sup>. In stark contrast, its organizational cousin, “SAFe Distilled”—emphasis on *Distilled*—balloons to a hefty 320 pages<sup>15</sup>. Has Agile turned into another “heavy” methodology it initially sought to replace? Are we collectively, as an industry, failing to see the irony? As the late Dave

Hussman, a revered Agile guru, amusingly pointed out, “Year after year someone hands me a 400-page book on *Lean*... How is that not funny?”<sup>16</sup>.

While Agile practices have become the dominant ways of working, with Agile teams or “squads”<sup>17</sup> widespread in organizations using short cycles and meetings, it’s disconcerting that large software projects often face significant issues. According to a joint study by McKinsey and Oxford University, these projects run 66 percent over budget and 33 percent over schedule on average, and as many as 17 percent of projects fare so poorly that they can threaten the very existence of the company<sup>18</sup>.

So, have we just come full circle, with Agile mirroring the pitfalls of the waterfall method it aimed to overcome? It feels as if the cheetah—the Agile micro-culture—is running in circles within an invisible cage, the larger organizational construct that includes not only projects but also operations requiring stability. Are organizations simply a collection of projects? Certainly not! To delve deeper into this conundrum and understand how to break free from this cage, we will need to re-examine the mechanisms that an agile team uses to coordinate itself ([Agile Coordination](#)). Subsequently, we will explore how coordination is utilized in organizations ([Organizational Forms and Cultures](#) and [Agile Culture and the Organizational Forms](#)) to discern how we might disseminate this culture of learning and collaboration more broadly within the organization ([Envisaging Organizational Agility](#) and [Part III](#)).

## 6.4 Chapter Summary

Originally designed to boost adaptability in \_\_\_\_\_<sup>a</sup> projects, the Agile Manifesto has influenced diverse organizational \_\_\_\_\_<sup>b</sup>. However, transitioning Agile principles into broader \_\_\_\_\_<sup>c</sup> contexts is fraught with challenges.

At its core, Agile values swift adjustments in response to \_\_\_\_\_<sup>d</sup>. Yet, ironically, when inappropriately applied, Agile risks spawning complexities it initially aimed to \_\_\_\_\_<sup>e</sup>.

True Agile transformation requires \_\_\_\_\_<sup>f</sup> Agile principles into the organizational ethos, not just isolated projects. Remember, superficial Agile \_\_\_\_\_<sup>g</sup> can cause more \_\_\_\_\_<sup>h</sup> than good, demanding mindful application.



Answers are on the next page. Revisit this section anytime to reinforce your understanding!

<sup>a</sup>: Software <sup>b</sup>: Cultures <sup>c</sup>: Organizational <sup>d</sup>: Feedback <sup>e</sup>: Alleviate <sup>f</sup>:  
Instilling <sup>g</sup>: Adoption <sup>h</sup>: Harm

## Notes

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- 3 Tobias Pfeiffer, Pragtob blog. 2012. <https://pragtob.wordpress.com/2012/03/02/why-waterfall-was-a-big-misunderstanding-from-the-beginning-reading-the-original-paper/>.
- 4 Fadi Stephan. “A Behind the Scenes Look at the Writing of the Agile Manifesto”. 2021. <https://www.kaizenko.com/a-behind-the-scenes-look-at-the-writing-of-the-agile-manifesto/>.
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Note on Easel Corporation: This was a software company in the 1990s that used a Scrum-like approach to software development, which involved short development cycles, regular communication with customers, and continuous testing and integration. Jeff Sutherland, one of the authors of the Agile Manifesto, was a co-founder of Easel and is credited with helping to develop and refine the Scrum methodology based on his experiences at the company.
- 8 Jeff Sutherland. “The Roots of Scrum”. 2006. <https://www.infoq.com/presentations/The-Roots-of-Scrum/>. Note: GE Medical (formerly IDX Systems Corporation) and the origins of Scrum. In the early 1990s, Jeff Sutherland, one of the co-creators of Scrum, was working at IDX as the Chief Technology Officer. At the time, IDX was struggling to develop and deliver software products on time and within budget, and Sutherland was tasked with finding a solution to these problems. Sutherland began researching various methodologies and

approaches to software development, and eventually came across a paper by Takeuchi and Nonaka that described a new approach to product development that emphasized self-organizing teams and rapid prototyping. Sutherland was impressed by the results that the approach had achieved at companies such as Fuji-Xerox and Honda, and began experimenting with similar ideas at IDX. With the help of Ken Schwaber, another Scrum co-creator who was then working as a consultant at IDX, Sutherland began refining and formalizing the approach, which he called “Scrum” after the rugby term. The first official Scrum project at IDX was launched in 1993, and the approach proved to be highly successful in delivering high-quality software products on time and within budget.

- 9 Chris Martin. “Scrum”. <https://cjmartin6162.wordpress.com/scrum/>. Note on Fidelity Investments: This financial services company was an early adopter of Agile methodologies, including Scrum and XP, in the early 2000s. Mike Beedle, one of the co-authors of the Agile Manifesto, worked with Fidelity on its Agile adoption and is said to have been influenced by the company’s approach to software development.
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- 17 Henrik Kniberg & Anders Ivarsson. “Scaling Agile @ Spotify with Tribes, Squads, Chapters & Guilds”. 2012. <https://blog.crisp.se/wp-content/uploads/2012/11/SpotifyScaling.pdf>.

- <sup>18</sup> McKinsey & Company. “Achieving success in large, complex software projects”. 2014. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/achieving-success-in-large-complex-software-projects>.

# **7 Agile Coordination**

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## **7.1 The Cheetah: A Paradigm for Agility**

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### **7.2.1 Fluid Communication and Subgroup Formation Patterns**

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## **8 “Scaling” Agile Teams?**

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# 9 ...and Organizational Oranges

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## 9.0.1 2.1.3.1. Beliefs About How Value is Created

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## 9.0.2 2.1.3.2. Beliefs About How To Organize

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## 9.0.3 2.1.3.3. Hybrids and Conflicts

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# **10 Agile Culture and the Organizational Forms**

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## **10.1 2.2.1. Unearthing the Project Pioneer: Agile as an Organizational Form?**

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## **10.2 2.2.2. The Added Challenge of Efficiency and Scale in Agile**

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### **10.2.1 2.2.2.1. Efficiency in the Agile Sphere: A Delicate Balance**

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### **10.2.1.2 1b. Decision-Making**

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### **10.2.1.3 1c. Automation**

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## **10.2.2 2.2.2.2. Scaling Agile: Navigating the Complexity**

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# **11 Rapid Races require Pit Stops**

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## **11.1 Maintenance: The Team**

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## **11.2 Maintenance: The Car**

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## **11.3 Maintenance: The Team and The Car**

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# **12 Context and Culture: The Tailwind of Agility**

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## **12.0.1 2.2.4.1. Navigating the Rapids: The Challenge of Adopting the Project Pioneer Form**

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## **12.0.2 2.2.4.2. The Culture Clash Chronicles: Daily Scrums Unmasked**

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# **13 Incongruence: Misaligned Agility in the Four Forms**

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# **14 The Challenge of Balancing Efficiency and Agility**

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# 15 Envisaging Organizational Agility

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# **Part III. Agility: Shifting Gears**

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# 16 An Organizational Agility Superculture

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# 17 Assessing the Agile Superculture

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# 19 Why Transformations Fail

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# 21 Incremental Development

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## 22 Going all in

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