AGILE METRICS

Effective Measurement in Modern Agile Organizations

INTRODUCTION

Agile development has been around for over twenty years, yet organizations have often grappled with the challenge of effectively measuring the results of their efforts. The complexity of Agile methodologies, with their emphasis on adaptability and iterative processes, can make traditional performance metrics seem inadequate or even incongruent.

Moreover, the very nature of agility often necessitates a shift in mindset from fixed targets to flexible outcomes, which can be difficult to translate into standard measurement frameworks.

Additionally, many organizations struggle with defining the right set of metrics that truly capture the multifaceted benefits of Agile, such as increased collaboration, faster time-to-market, and enhanced customer satisfaction.

Striking the right balance between quantifiable results and the intrinsic value of Agile principles has proven to be a formidable task, leading to ongoing exploration and refinement of measurement approaches in the dynamic landscape of Agile development.

The Importance of Metrics

Management guru, Peter Drucker, is credited with the quote, “If you can’t measure it, you can’t improve it.”

This timeless wisdom underscores the essential role of quantifiable metrics in driving progress and refining strategies. In the dynamic landscape of business and personal development, this principle is a North Star, guiding decision-makers toward effective solutions.

Whether it's in the realm of organizational efficiency, individual growth, or the pursuit of ambitious goals, the ability to quantify and analyze key aspects empowers us to make informed adjustments and track our advancements.

Drucker's words serve as a reminder that without the tools to assess and understand our actions, we risk stagnation and miss out on opportunities for meaningful enhancement.

The Pitfalls of Measurement Efforts

While Agile metrics can be valuable tools for guiding and improving development processes, they also come with potential pitfalls that organizations must navigate carefully.

One significant pitfall is the risk of focusing solely on quantitative metrics, leading to a tunnel-vision approach that may overlook the broader qualitative aspects of Agile success.

For instance, if teams are solely evaluated based on metrics like velocity or the number of user stories completed, they may neglect important factors such as customer satisfaction, innovation, and long-term sustainability.

Another pitfall is the "gaming" of metrics, where teams might optimize their performance solely to meet the metrics' targets, sometimes at the expense of overall project quality or collaboration. This can undermine the true spirit of Agile, which emphasizes continuous improvement and responding to change.

Additionally, using metrics to compare teams or individuals can lead to unhealthy competition rather than fostering a collaborative environment. To avoid these pitfalls, organizations must carefully select a well-balanced set of metrics that align with their Agile goals, encourage transparency, and promote a culture of learning and adaptation rather than mere numerical achievement.

CASE STUDIES

Over the past decade, we at Mindset180 have been helping organizations implement agility at scale. A recurring challenge is the ability to measure their agile efforts.

The case studies that follow are meant to serve as an example of measurement “anti-patterns” and how we were able to provide alternatives and new perspectives to ensure the effectiveness and adaptability of an organization’s ability to validate improvement efforts.

Misaligned Metrics

The perils of using metrics that are not aligned with corporate objectives are profound and can result in a host of issues for an organization. When metrics are disconnected from overarching goals, there is a risk of misdirection, where teams and individuals focus on activities that do not contribute to the company's strategic vision.

This misalignment can lead to inefficiencies, wasted resources, and missed opportunities to drive real value.

Moreover, it can create a sense of confusion and disengagement among employees, as they may not understand how their efforts contribute to the larger picture.

In some cases, it may even foster a culture of 'metric chasing,' where teams optimize for the chosen metrics, regardless of whether those optimizations actually benefit the organization's core objectives.

To mitigate these perils, it's essential to carefully select metrics that align with the corporate mission, encourage cross-functional collaboration, and continuously reassess their relevance in the ever-evolving business landscape.

By ensuring that metrics directly support corporate objectives, organizations can achieve greater focus, cohesion, and meaningful progress toward their long-term goals.

CASE STUDY: NO ONE CAN ANSWER WHY

With this client, we were engaged as part of a team of consultants who had the goal of bringing agility at scale to a moderately-sized financial services company.

In the earliest meetings with the client, we asked a group of senior leaders why they had chosen to adopt agility in their organization. The group looked at one another, seemingly deferring to one another to produce an answer. There were half-hearted statements made about “faster time-to-market,” “higher productivity,” and “more efficient processes,” but no one could provide a single business driver.

For this client, we needed to do considerable work and workshops with the leadership team to define the vision, the desired future state for the organization. This allowed them to focus transformation objectives towards achieving the vision and helped to focus the organization on choosing an agile implementation to meet their goals.

Metrics as a Club

Using metrics as a club, wielding them as a blunt instrument to enforce compliance or control, is a perilous path that can have detrimental consequences.

Metrics, when employed in this manner, can become tools of fear rather than instruments of improvement. When organizations or individuals employ metrics as a punitive measure, it fosters a culture of distrust, stifles innovation, and discourages the very openness and experimentation that metrics should encourage.

Instead of motivating teams to excel, it can lead to gaming the numbers, sacrificing the true essence of progress in favor of meeting arbitrary targets. This approach ignores the nuanced context behind the numbers, disregarding the human elements, and can have a demoralizing effect on those being measured.

Metrics should be used as guiding lights, providing valuable insights to make informed decisions and facilitate growth, not as clubs to instill fear and wield power. It's crucial to use metrics as a tool for collaboration, understanding, and continuous improvement rather than as a weapon of control.

CASE STUDY: COMPARING TEAMS

It is quite common among organizations that are moving from a more traditional, PMO-style system of governance to view productivity as utilization rather than value delivery.

Early attempts at measuring success centered around velocity, or the average number of points each agile team recorded at every iteration. This ultimately led to discussions about how teams could increase velocity. Bar and pie charts were produced that would show velocity comparisons.

This, by far, is one of the most poisonous of measurement approaches. Not only did it seek to compare multiple incomparable teams due to team size, experience, and complexity of work, but also led the teams to begin to count half-finished work (coded, not tested) so that their "numbers" would look good.

One thing was certain; this organization was also trying to implement continuous integration and deployment (CI/CD). The goal was to deliver value earlier and in smaller increments.

The solution we sought was to consider the cost per deployed work item as a reasonable proxy for team productivity. It provided a simple but effective way to evaluate team productivity while factoring in team size and composition.

Vanity Metrics

Vanity metrics are the alluring yet deceptive numbers that often dominate discussions about performance but provide little substantive insight.

These metrics might make you feel good temporarily, but they rarely offer a genuine understanding of the core factors driving success or failure.

Common in the digital age, vanity metrics can include large social media follower counts, page views, or app downloads, which might impress at first glance but fail to reveal the engagement, conversion rates, or user satisfaction that truly matters.

Falling for the allure of vanity metrics can lead organizations astray, misdirecting resources toward superficial gains while neglecting the critical measures that impact long-term growth and meaningful impact.

To ensure meaningful progress, it's essential to dig deeper, seeking metrics that truly align with strategic goals, customer needs, and the heart of what makes a venture successful rather than chasing the fleeting allure of vanity.

CASE STUDY: AGILE TRANSFORMATION

In many cases, one of the first steps to an Agile transformation effort is to establish an Agile Center of Excellence (COE). That group is charged with shepherding transformation activities and providing coaches to assist in enabling the teams.

In the early stages, frameworks and training take center stage in transformation activities. This client set targets such as the “percentage of teams using scrum,” “the number of associates receiving agile training,” and a homegrown “agile maturity model.”

None of these spoke to the organization’s ability to use the training they received or to successfully execute in an agile manner.

Upon consulting with the leadership team of the COE, the decision was made to rely on student feedback scores to evaluate the effectiveness of the training. Questions were asked not only regarding the knowledge and facilitation but also in the student’s confidence that they had been given the necessary context to be successful. The percentage of teams using Scrum turned to measuring the team’s ability to have a potentially shippable product increment at the close of each iteration.

Tooling Limitations

The limitations of Application Lifecycle Management (ALM) tools in Agile environments have prompted a reliance on metrics to bridge the gaps and ensure effective project management. ALM tools, while valuable, often struggle to keep up with the dynamic nature of Agile methodologies, especially when dealing with rapidly changing requirements, iterative development, and the need for continuous feedback.

Metrics, in this context, serve as a complementary layer, providing insights that ALM tools might miss. By carefully selecting and monitoring key performance indicators (KPIs) that align with Agile principles, teams can gain a clearer understanding of progress, identify bottlenecks, and facilitate data-driven decision-making.

This adaptive use of metrics helps overcome the limitations of ALM tools, creating a more holistic view of the project's health and ensuring that Agile teams can stay on track, remain responsive to change, and continuously improve their processes even in the face of tooling limitations.

CASE STUDY: BUILT-IN CHARTS

ALM tools such as Jira or Azure DevOps are critical to managing the flow of value in an organization. The problem enters when the tool becomes the center of the universe.

The other common challenge with ALM tools can take one of two paths that will lead to measurement anti-patterns.

The first of which comes from the desire to use canned reports to measure agile organization. This is problematic because the reports do not take into consideration the uniqueness of each enterprise and its goals. Velocity charts, burn-downs, and cumulative flow diagrams are used to measure everything from productivity to predictability.

The other path is when the ALM tool is customized to meet reporting requirements. This not only is an inflexible way to measure but also sub-optimizes the overall system by creating the need to do extensive mapping and data entry to capture the needed information.

Both occurred at multiple client engagements. In all cases, the resolution was the same.

Establish simple metrics to capture productivity, predictability, adaptability, quality, collaboration, and engagement, one in which a Scrum Master could easily enter six data elements into a data repository prior to each iteration review. The subsequent product was reportable, consistent, and simple enough that the system did not become stressed in maintaining the tool and doing data entry. In addition, as goals evolved, changing out one data element for another proved a simple task.

OUR APPROACH

At Mindset180, we understand the importance of measuring as a means to validate the efficacy of our agile programs. This is why we have created our AMI services solution.

AMI stands for Align, Measure, Influence. Our offering will provide you with the ability to align your business units to the right agile goals and identify the most meaningful success metrics and leading indicators you need to validate that you are headed in the right direction.

From there, we will help you to identify and coach key contributors throughout the organization to influence the behaviors of others so as to achieve your organization’s goals.

This isn't traditional agile coaching; this program was designed so that you and your organization can grow the skills internally to lead and sustain the change.

For more information, contact Mindset180 today at contact@mindset180.com or find us on the web at www.mindset180.com.