

MEASURING ENTERPRISE AGILITY

IS YOUR ORGANISATION REALLY AGILE? HOW DO YOU KNOW?

MATTHEW HODGSON – ZEN EX MACHINA

MIA HORRIGAN – ZEN EX MACHINA

Introduction

Agile has transformed the world of work. Over the past 25 to 30 years its alternative yet robust, focused, and disciplined approach to work, has greatly increased delivery success rates, improved quality, and speed to market, customer satisfaction, and boosted the motivation and productivity of teams (Rigby, Sutherland & Takeuchi, 2016). This shift in approach is outlined in a set of principles, known as the Agile Manifesto. The document describes the foundation mindset, actions and behaviors of agile in four simple statements supported by 12 principles:

- Individuals and interactions over processes and tools.
- Working software over comprehensive documentation.
- Customer collaboration over contract negotiation.
- Responding to change over following a plan.

Embracing this shift in mindset, 85% of organizations now have strong preferences toward agile product management operating models over traditional, linear, project management methods, with adoption set to reach 80% by 2022 (Omale, 2019). These operating models have enabled organizations to cope with continuous change and empowers the people in them to flourish in a world that is increasingly volatile, uncertain, complex and ambiguous.

At the Bank of Montreal, Cappelli and Tavis report (2018), the shift to agile began as employees joined cross-functional product-development teams to make the bank more customer focused. This alignment of thinking, outcomes, and impacts is what Steve Denning (2016) describes as the Law of the Customer. The close collaboration within these teams accelerated software products and services that customers valued, and with the increasing importance of software in general business strategy, business leaders in turn increasingly turned to agile for every aspect of their operations. With the business side of the bank learning about agile principles from their colleagues, and product management learning how

to understand and focus on delivering customer needs, the bank now thinks about its internal human resources practices, including performance management, in terms of teams, not just individuals.

Psychological clinics in Australia show just how versatile agile values, actions, and behaviors can be. In health care — an industry that is constantly under pressure and notorious for its resistance to change — agile has played a powerful role in being responsive and acting quickly to make a big difference to patient’s immediate safety and future recovery (Faucher, 2019). With Monash Health struggling to meet new performance indicators for emergency care, agile was introduced to address a complex problem that more traditional, planned approaches had consistently failed to solve. Adopting agile principles as a foundation for reforming clinical care enhanced Monash Health’s customer experience, enabled clinicians to adapt quickly to feedback, and provided them with the new capability they needed to be more effective and efficient.

Change Drives the Need to be Agile

The rise of agile in every organization and across every type of work and industry is driven both by the passion of those who love working this way and by organizations that have now come to a startling realization: organizations based on 20th century management processes built atop 19th century management principles, won’t thrive in a 21st century VUCA¹ world.



There’s simply no way to build tomorrow’s essential organizational capabilities—resilience, innovation and employee engagement—atop the scaffolding of 20th century management principles. (Hamel, 2007)

The only way to cope sustainably with today’s rapidly changing marketplace, changing technology, changing stakeholder needs, and changing customer expectations, is to embrace agility. Organizations must become as nimble as the rapidly shifting context in which they find themselves, but what does it mean for an organization to embrace agile and be “agile”?

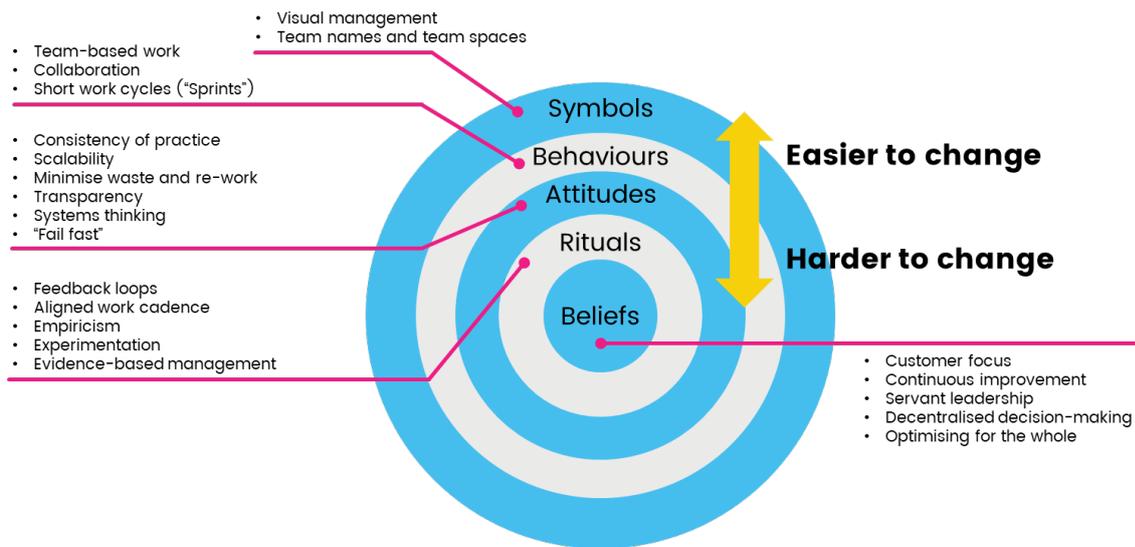
What is an Agile Culture?

Agile is a dramatically different framework for managing organizations and guiding and directing its people. Agile begins with a different view of the type of culture that is needed to create an ability to pivot rapidly to change, to make an impact with customers and the market faster, deliver outcomes in a sustainable and repeatable way. An agile culture is defined by how people inside the organization interact with each other. While people will

¹ Volatility, Uncertainty, Complexity and Ambiguity

often talk of culture as “how we do things around here”, more precisely, it’s created by the actions people take and their learned behaviors at work (Whitehurst, 2016). Moreover, culture is described through many factors encompassing symbols, behaviors, attitudes, rituals and routines, and beliefs (Wasfisiz, 2015). An agile culture, therefore, is described beyond the scope of post-it notes, happy teams, and “ceremonies” and seeks to understand the behaviors, attitudes, customs and beliefs that create the well documented outcomes that agile brings - faster to market, improved ability to pivot, and reduced costs.

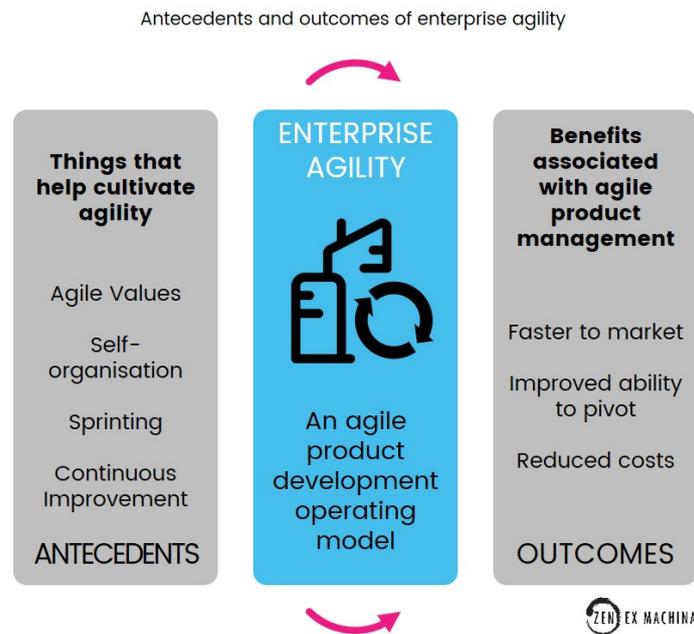
The different levels of organisational culture



Adapted from: Wasfisiz, B. (2015) An organisational cultural perspective.

Measuring Agile Culture

For many years now, Zen Ex Machina has been examining agile culture, actions, and behaviours, of agile leaders and their teams in the support of growing and strengthening of both large-scale agile programs and whole of enterprise agile transformation across more than 20 different organisations. The actions and behaviours assessed over this period of time were derived from the actions and behaviours described in Agile Manifesto and its 12 principles, the Official Scrum Guide (Sutherland & Schwaber, 2017), as well as from Lean and Kanban practices. Zen Ex Machina then tracked these behaviours and collected behavioural observation data over time across hundreds of teams and the improvements associated with agile product management.



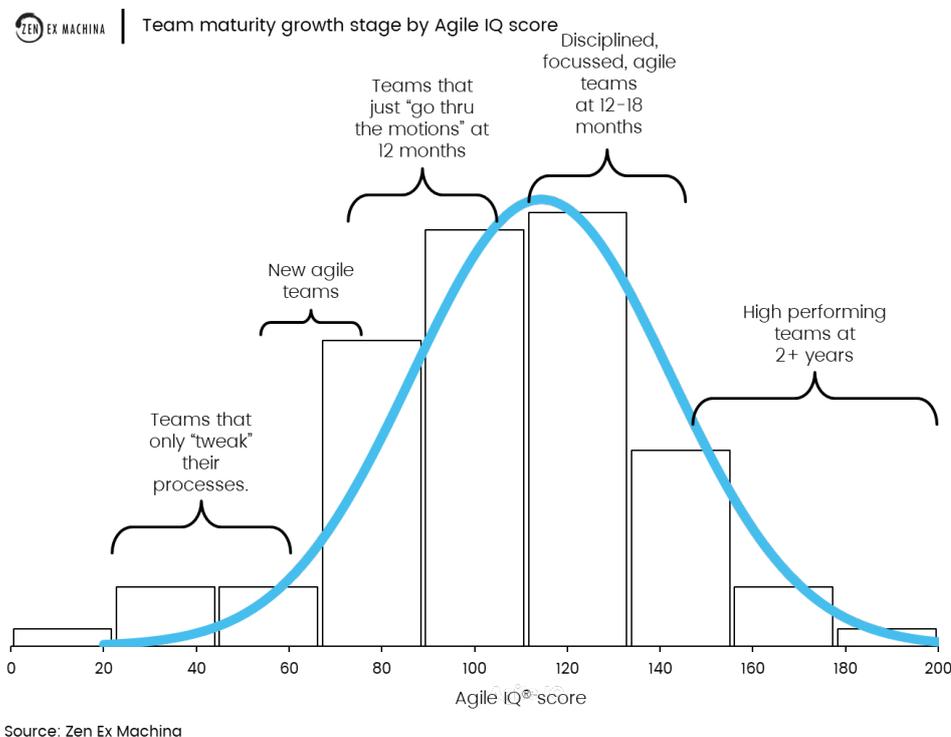
In the analysis of this longitudinal data, four primary factors emerged that described the evolving agile cultures across these organizations:

- **Self-organization** – Supporting teams to self-organize rather than being management led reduces time to decision-making and empowers teams to solve problems for themselves and deliver value for high quality customer outcomes.
- **Agile values** – To improve speed to market, to improve ability to innovate and pivot, a culture must embrace a focus on the customer and what is of value to them, collaboration, transparency, and empiricism.
- **Sprinting** – Rapid, incremental delivery in short work cycles is key to improving speed to market, ability to learn, pivot and innovate.
- **Continuous improvement** – Ability to innovate and adapt to change requires acknowledging there is always room to improve, to be active in learning, and the role of empiricism and metrics to create repeatable, scalable actions that create true improvement.

These four factors breakdown into a total of 23 subfactors, each providing deeper insight into the behaviors and actions that create a strong agile culture.



When aggregated, the data provides a picture of agile capability maturity over time - what Zen Ex Machina has coined as "Agile IQ®".

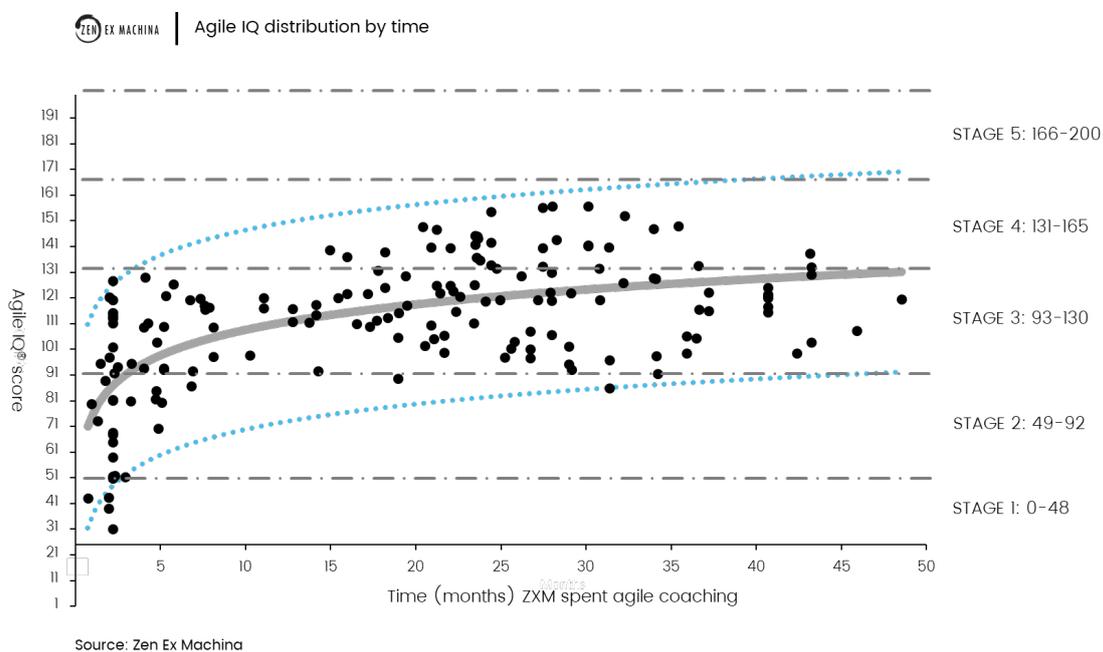


Teams that only tweaked their way of working typically remained management-led rather than transitioning to self-organization. These teams rarely moved beyond an Agile IQ® score of 60. These teams had high levels of re-work, higher recorded hours of overtime, and took longer to make changes in the direction of their work than teams who had only started out using Scrum as their method of operating.

Teams that started with the basics of Scrum – an agile framework – and put into place its events, and embraced its focus on empiricism, scored better on Agile IQ® than teams that only tweaked their processes. These teams reduced their rework, improved their quality and productivity in as little as 3 months compared to teams with an Agile IQ® lower than 80.

Teams who had practiced Scrum for 12 months, and took a focused and disciplined approach to empiricism, self-organization and continuous improvement had Agile IQ® scores greater than 120. These teams had very little re-work, no overtime, and continuously improved their quality and productivity.

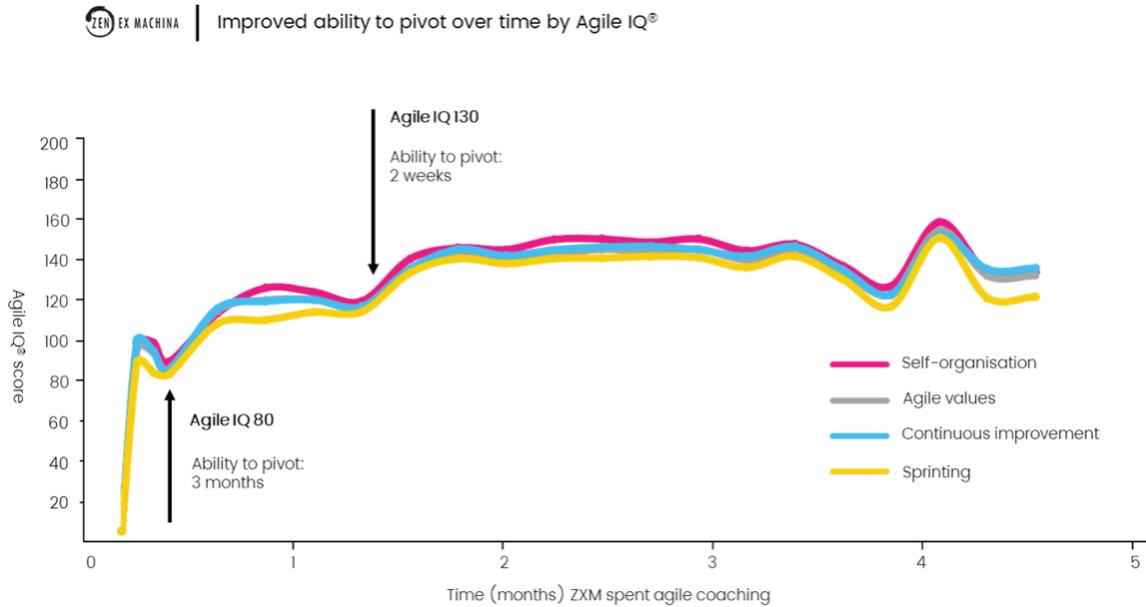
A few teams who had practiced Scrum also added complementary practices, such as Kanban and DevOps to their operations. These teams were the highest performing in terms of productivity, having no rework, and no overtime. These highest performing teams had an Agile IQ® score over 150. Notably, these teams played a pivotal role in innovation and quality throughout their programs supporting others to improve and create innovative solutions to complex product development problems. With their help, several programs were able to achieve and sustain zero defects in software development over a 12-month period.



These stages that teams moved through can be depicted in five discrete stages of agile capability maturity:

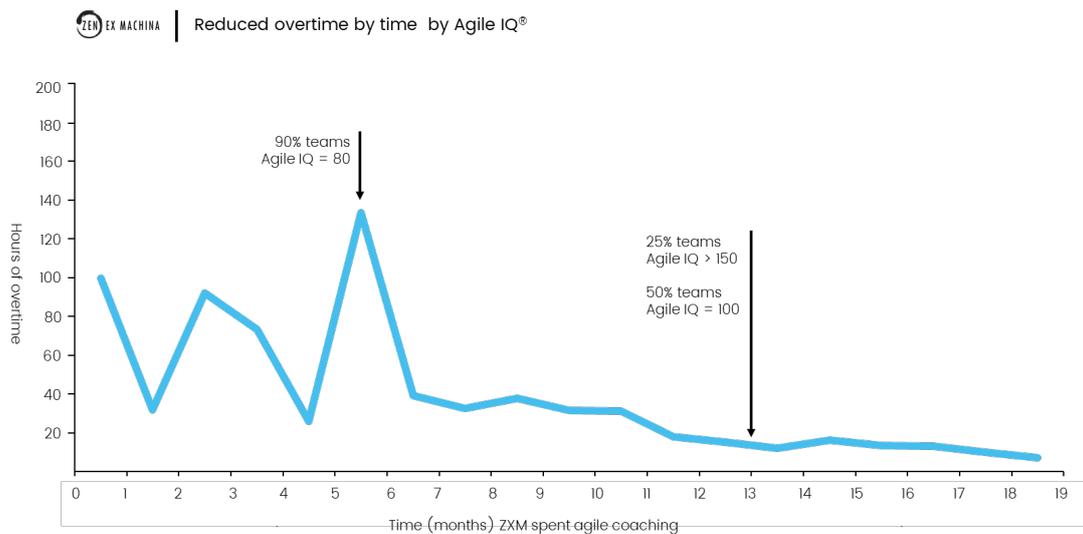
- **Stage 1 – Starting.** A focus on building teams around the principles of the agile manifesto.
- **Stage 2 – Establishing.** A focus on team and customer collaboration with shorter work cycles and feedback loops.
- **Stage 3 – Evolving.** A focus on delivery through self-organization, and sustainable pace.
- **Stage 4 – Strengthening.** A focus on reflection, simplicity, and a continuous attention to improving the skills that create repeatable outcomes.
- **Stage 5 – Optimizing.** A focus on continuous improvement through “systems thinking” and metrics-driven decision-making.

As Agile IQ® increased, each organization’s ability to react faster to the market and pivot increased. In one organization, Zen Ex Machina noted a sustained decrease from 3-months lead time to get solutions to customers reduced to 2 weeks.



Source: Zen Ex Machina

As Agile IQ® increased, the data shows that each organization’s quality improved, defects for software development decreased, and rework decreased. One organization’s defects decreased by 92% over 12 months as their Agile IQ® improved from 80 to 100 in 50% of teams. This same organization experienced a 43% reduction in work for the same volume of output.



Source: Zen Ex Machina

Organizations whose teams Agile IQ® improved from 80 to 100 saw a decrease in hours of overtime with an associated savings of \$1.1M USD per year in programs of as little as 10 teams.

Conclusions

In recent years, the application of agile frameworks and product management operating models have seen dramatic growth. The numerous industry surveys that have been conducted over the last decade report that organizations receive a number of outcomes from being agile, including an improved ability to manage changing priorities, increased team productivity, improved transparency, improved team morale, and a decrease in time to market (VersionOne, 2020). Unfortunately, the collection and analysis of empirical evidence of these outcomes is rarely conducted. Without robust empirical measures, organizations tend to turn to the symbols they can see, such as team happiness, velocity, throughput, visualization of work by using post-it notes, attendance at Scrum events, or “town hall” presentations and brown bag agile sessions. While these outward symbols have their uses, they don’t tell the real story of agility. The lack of a standard and evidence-based mechanism to measure agility leaves many organizations in the dark regarding what activities are needed to not only lead to agility, but what activities leaders should support and promote help to make enterprise agility sustainable, repeatable and scalable, regardless of the type of work.

When organizations focus on symbols alone, they run the risk of being “agile in name only” – a term sometimes applied to organizations that are implementing the practices of “agile”, but without an understanding of what cultural change is needed to create a truly agile mindset (Denning, 2019). Many use these symbols to claim they’re agile even though they are not being managed any differently from a traditional bureaucracy and management-led culture.

To understand whether an organization is agile, one has to look beyond what organizations are saying and look at how the culture influences how they are operating. Agile IQ® provides that perspective. Its factors and sub-factors, assess the facets of an agile culture – from its actions to behaviors and values – and provides a leading indicator of a growing agile culture. Overall, it's an effective leading indicator of the changes to mindset, behavior and culture that's needed to ensure that your investment in your agile enterprise is on track to deliver the results you need.



For more information about Agile IQ® or to contact Zen Ex Machina go here:

<https://zenexmachina.com/contact-us/>

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