

Mindset – The Biggest Barrier to Agility

How your view of the world can slow down or kill an agile transition

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Introduction

Agile has crossed the chasm. What was initially regarded in management circles as a toy methodology for startups and small teams is now being considered or implemented in most organizations. Survey data seems to indicate that migrating from a traditional (“waterfall”) methodology to an agile approach is a good idea.¹

Still, Ken Schwaber – one of the two fathers of Scrum, the most common agile framework – expressed a deep concern during an interview: “I estimate that 75% of those organizations using Scrum will not succeed in getting the benefits that they hope for from it.”

I believe that some of the transformation efforts fail because of the collective mindset of the organization. Most organizations hold dear concepts like efficiency, resource utilization and control. This type of organization I call “traditional”. Agile teams cannot perform in traditional organizations. They need to be surrounded by an environment that focuses on the individual, seeks to provide customer value and allows its members to self-organize. Trying to import agile practices in organizations with a traditional mindset will lead to limited results.

In order to change its collective mindset, the organization has to engage in what is called double-loop learning by analyzing its core beliefs. A few tools for mindset shifting are provided at the end.

¹ 2013 IT Project Success Rates Survey Results, by Scott W. Ambler – <http://www.ambysoft.com/surveys/success2013.html>

Cargo Cults

Suppose you are an extravagant traveler. For your next summer holiday, you've decided to visit the exotic island of Tanna in Vanuatu. When you arrive there and meet the local people, something seems off. They are all dressed up in a sort of uniform, have "USA" painted in red color on their naked chest and seem to run a military parade with rifles made out of bamboo.

When you ask your guide what's the reason behind this apparent madness, he explains that the natives developed a "cargo cult". They were exposed to the results of modern civilization through their interaction with soldiers fighting in the Second World War. They observed airplanes flying above their islands and dropping food, soldiers marching in manufactured clothes and medicine healing illnesses. Lacking the knowledge of how modern men obtained these, indigenous people attributed these to spiritual entities. Due to their limited interpretation of facts, these tribes concluded that in order to obtain the same goods, they should follow the rituals of the colonists or soldiers.

As an agile coach, I have encountered teams and organizations where things went great following the introduction of Scrum. But I also worked with teams that struggled with it. Sure, we managed to write user stories, have a ScrumMaster assigned and run Sprints. But the team didn't feel like it was improving its output and the customers weren't happier either.

So I started to pay more attention to what happens in the teams that are struggling. What I found out was that these teams have a lot of small dysfunctions. For instance, the Product Owner would come to the planning meeting only half-prepared, then change the backlog three times during the Sprint. In other cases, every story was being worked on by a single developer. Or maybe while reviewing the action items from the previous retrospective we'd realize that nothing had been done, mainly because the team "did not have enough time for it".

In essence, on these teams we were *cargo culting* – we adopted some practices that other people had discovered without also adopting their way of working. You know you are doing this when you're insisting on following the user story template for all work: "As a developer, I want to upgrade the database software so that I can take advantage of its new features".

You may have heard the phrase "Don't do agile, be agile". This is exactly what it refers to. Agility isn't about sprints, Product Owners, burndown charts or visual boards. It's about adaptability, collaboration, customer focus and continuous improvement. The purpose of an agile transition shouldn't be to adopt agile practices, but an agile mindset.

Effectiveness follows mindset

By this point you might be wondering: “Ok, so what *exactly* is a mindset?”. Different people view it differently, so here is my definition: an individual or organization's mindset is *the set of core beliefs about the world that inform action*. For example, in politics you might prefer socialism or liberalism. If you are a manager, your mindset might lead you towards micromanagement or towards delegation and empowerment. Choosing between emacs and vim could also be attributed to your mindset.

Some authors believe that a company's effectiveness results from its collective mindset. Bob Marshall proposed a model² revolving around four core mindsets: *ad-hoc* (“don't think about it, just do it”), *analytical* (split the work, assign it, control it), *synergistic* (self-organizing teams, emergence) and *chaordic* (maximize effectiveness by working at the sharp edge between order and chaos). As companies move from an ad-hoc mindset towards a chaordic one, their organizational effectiveness increases.

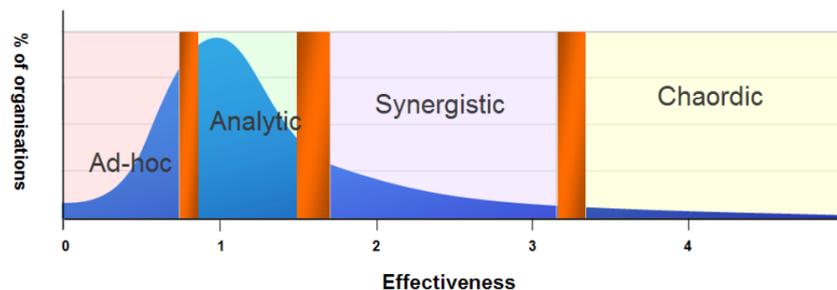


Illustration 1: Org. effectiveness as a function of mindset

Companies following traditional management practices are characterized by an analytical mindset. Agile companies have a synergistic mindset. If we are to take the effectiveness model serious (and I believe we should), it follows that in order to reap full benefits of an agile transition and increase effectiveness, an organization should also adopt the agile mindset, not only its practices.

The Traditional and the Agile Mindsets

Let's take a closer look at what sets the two mindsets apart. When organizing the various beliefs associated with the traditional and agile way of thinking, I've noticed that they revolve around three fundamental theories that form when you answer these three questions:

- How can we influence employee behavior?

² The Marshall Model, by Bob Marshall – <http://flowchainsensei.wordpress.com/rightshifting/the-marshall-model/>

- Where do we focus our efforts?
- How do we design our systems?

People with traditional and people with agile mindsets answer these questions differently. I've summarized the answers in Tables 1 and 2.

Theory X	Inward focus	Mechanistic thinking
<ul style="list-style-type: none"> • Individual performance must be managed • Talent is innate/constant • Must motivate extrinsically • Ignore needs 	<ul style="list-style-type: none"> • The highest concern is efficiency • Low tolerance for failure • Maximize utilization • Tightly control work • Organize using projects • Optimize for the short term 	<ul style="list-style-type: none"> • Organize in a hierarchy • Information flows in one direction • Functional teams • People are interchangeable resources • Play power games

Table 1. *The Traditional Mindset*

Theory Y	External focus	Systems thinking
<ul style="list-style-type: none"> • Manage individual passion • Talent can grow • Trust that people mean well • Attend to people's needs 	<ul style="list-style-type: none"> • Generate value for the customer • Manage products • Optimize flow • Adapt as the situation changes • Learn incrementally • Optimize for the long term 	<ul style="list-style-type: none"> • Organize in a network • Maintain constant dialogue • Provide transparency • Cross-functional teams • Collaborate • Long lived teams • Continuous improvement

Table 2. *The Agile Mindset*

The Traditional Mindset

The traditional mindset is characterized by a negative view of individual motivations (Theory X), a focus mostly on the internal environment of the organization and mechanistic thinking.

*Theory X*³ states that people are inherently lazy. They dislike work and will avoid it whenever possible. As a consequence, management must supervise activities and motivate workers using “carrots” and “sticks”. Every employee should be subject to a performance management program to ensure the company obtains maximum productivity from her. Talent is something you're born with, so there is no sense in investing resources and energy to develop people. Professionalism is associated with rationality, so managers try to eliminate emotions from the

³ Wikipedia Theory X and Theory Y – http://en.wikipedia.org/wiki/Theory_X_and_Theory_Y

workplace. Individual needs must be kept private. By following this theory, organizations put in place practices like performance reviews and micromanagement and will often recruit based on technical skills.

In terms of focus, managers in traditional organizations concentrate on the *internal* processes of the organization. Of utmost importance is efficiency – getting maximum results with the available means. As such, utilization must be optimized. All employees must be kept busy at all times. Since the world is assumed to be predictable, failure to execute is not tolerated as it means somebody has not done their job. Work tasks must be planned and tightly controlled. As a consequence of the above, it makes a lot of sense to organize initiatives using projects, because they offer a framework for fixing scope, resources and time (the “iron triangle”). Since projects defined using the iron triangle will inevitably lead to overruns in at least one of the dimensions, there's a constant feel of firefighting. Managers concentrate on putting out fires, so most thinking is tactical and for the short term. When focusing internally, management adopts practices like Gantt charts, detailed plans and employee utilization targets.

When thinking about the system necessary to get the work done, the traditional manager likens it to a *machine*. It has multiple components and each has to be optimized individually. Strategy is devised at the top and its implementation is the responsibility of a hierarchy that has to execute it. Information (strategies, plans, goals, measurements) flows in one direction, from the top down. Groups must be organized by function (e.g. development, quality assurance, product management) and they will optimize for that particular function. As long as the organizational machine is finely tuned via explicit, comprehensive processes, the people become simple cogs. It should be very simple to find a substitute for a position. What is important is to climb up the corporate hierarchy and manage as many people as possible – headcount is the trust signal of power. In order to be promoted, one must spend a good amount of time building social capital and playing corporate games like hiding information, denying accountability and harvesting resources. Two practices generated by these beliefs: people working on multiple projects simultaneously and unidirectional reporting (up the hierarchy).

The Agile Mindset

Let's now turn our attention to how agile organizations answer the three questions about motivating people, focusing efforts and designing systems.

The agile movement was founded on *Theory Y*^[3]. After all, its manifesto says “Build projects

around motivated individuals. Give them the environment and support they need, and trust them to get the job done”. What this means in practice is that on an agile team there isn't as much focus on managing individual performance as on creating a motivating environment where passionate people can thrive. Agilistas have a growth mindset, believing that every person can and should develop their skills constantly. Mature agile teams are characterized by a high level of trust between the members. Good leadership practices (building a share vision, dedication to individual development) are very common in this type of organization, with managers dedicating their attention to understanding and attending to folk's needs⁴ and feelings. People are hired for their attitude and willingness to learn.

Agile companies look “outside the building” and maximize *value for the customer* – this is what drives most of the prioritization discussions. The focus shifts from projects to products, so quality increases and the flow of features from the development team to the customer is stabilized (the time it takes for each feature to pass through the development system is minimized). Because external conditions are recognized as intrinsically unpredictable, changing plans is seen not as a problem, but as a solution. There is great care to monitor the environment and innovate when deemed appropriate: adjust plans, products and processes. Teams seek to continuously learn both about the problem and the solution and the way to do that is by working iteratively and incrementally in order to test their assumptions. By shifting the focus to the product, plans take into account the long view. After all, projects usually last a few months, whereas successful products may live more than a decade. When focusing on customer value, teams often assign a dedicated person as the product champion (customer in XP, Product Owner in Scrum).

When designing systems using an agile mindset, a common tactic is to resort to *systems thinking*. Systems thinking is a way of looking at the world that emphasizes the interactions between a system's components. Contrary to the mechanistic view, which tries to optimize each subsystem individually, system thinking mandates that you optimize the whole. This means paying special attention to the collaboration between individuals, teams and departments. Hierarchy is deemed inappropriate and the network model of information exchange is emphasized. People are viewed as peers, regardless of their title and this enables a constant dialogue. Full transparency is necessary for making joint decisions. In order to facilitate productive exchanges, teams must be cross-functional. Because team formation is not coupled to running projects, teams will often be long lived, working together for one year or

⁴ Known as “the antimatter principle” – <http://flowchainsensei.wordpress.com/2013/10/12/the-antimatter-principle/>

more. Consequently, they will engage in continuous process improvement in order to optimize their work system. To collaborate across teams, people interested in a particular topic (product management, architecture etc.) will form communities of practice.

Changing mindsets

How likely is it that you could change your political convictions? What about your view on the impact of global warming?

If you want to change mindsets, one thing is certain: it will be hard, if not impossible. To understand why, we need to look at *single-* and *double-loop learning*, two concepts made popular by Chris Argyris⁵ and later on by Peter Senge⁶. Argyris argues that there are two types of learning. Single-loop learning is we are used to do. We take some actions and expect some results. If the results don't match our expectations, we learn from that and adjust our actions. Double-loop learning happens when, by reviewing the results, we conclude that the goals and beliefs which led us to create the actions were wrong.

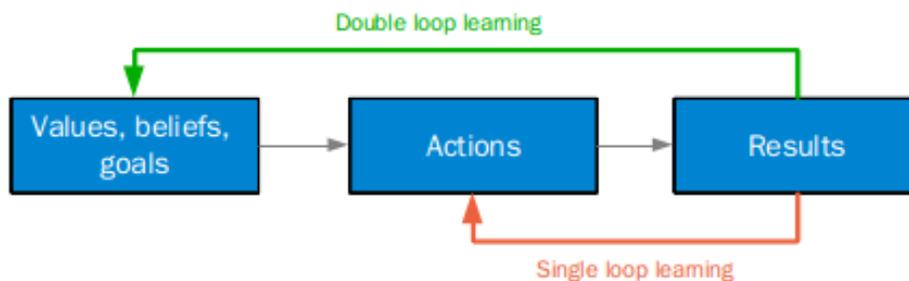


Illustration 2: Single- and double-loop learning

Let's take an example. Suppose we decide that running code reviews will increase the code quality. We set up a code review process and after a while analyze its results. The results are discouraging: the quality hasn't increased and the team doesn't feel that the code review provided any additional value. In this case, single-loop learning might mean trying to do the code reviews differently: maybe starting from next week we'll have them formalized, once per week, with the chief architect attending. Double-loop learning, on the other hand, might mean we sit down and ask ourselves if code reviews were a good idea after all. Perhaps instead of

⁵ Argyris, C. and Schön, D. – *Theory in Practice Increasing professional effectiveness* (1974)

⁶ Senge, P. – *The fifth discipline The art & practice of the learning organization*, revised ed. (2006)

doing them we might opt for automated static code analysis or pair programming.

Most organizations are very good at single-loop learning – it's something we've been trained to do. We call it “problem solving”. Our libraries have massive tomes on setting goals and executing plans, but we don't have nearly enough books on double-loop learning. Just think about it for a second. When was the last time your team had a productive debate about its beliefs, on topics like these:

- Do we believe that talent is innate or can it be developed?
- Do we prefer working with specialists or generalists?
- Should we learn proactively or when the task at hand requires it?

Try this activity Review the Principles of the Agile Manifesto

One of the most engaging activities I run as a coach is reviewing the agile manifesto. This simple activity takes about 45 minutes and provides valuable insight for all attendees. First, split all participants in 2-4 groups (depending on total number of attendees, aim for 3-5 people per group) and assign 3-6 principles to each group.

Ask each group to debate the following questions for each principle:

- What are some examples from the last 3 months where we respected that principle?
- What are some examples from the last 3 months where we haven't respected that principle?

After 10 minutes, have a group discussion. Dedicate 2-3 minutes for each principle. When people disagree on the relevance of a principle to their specific case, ask what it says about their beliefs.

To move to an agile mindset, an organization has to engage in double-loop learning. Here are some things you could do to make that happen:

- **Learn more about the agile mindset.** Some teams learn agile practices mechanically, without paying attention to the underlying principles and values. Whenever you learn a new technique, figure out what problem it was designed to solve and in what context.
- **Understand your own beliefs.** Every week, review your most important decisions. What were the main assumptions behind them? Have you used Theory X or Y? Was the focus internal or external? Did you consider the whole system or only a part of it?
- **Surface current mindset.** Organize open meetings where the current organizational

mindset is discussed. What are the core beliefs of the organization? How are these are influencing your decisions?

- **Involve top management.** Involve, where possible, the most senior managers in the debates about mindset. Provide feedback where management actions are not congruent with the agile mindset.
- **Advocate for openness.** During group discussions, propose adding “respectful criticism of proposed ideas” to the list of team agreements. Have a facilitator that makes sure debates don't turn into *ad hominem* attacks, but are instead centered on ideas.
- **Run root cause analysis.** When you encounter a problem, don't just fix it. Go to its root by asking a series of “Why?” questions. If you use the perspective of the agile mindset, can you identify different root conditions?
- **Be patient.** If learning to use a new technique takes a few months, shifting an organization's mindset will likely take years. Brace yourself for the long haul.

Conclusion

As more and more companies are starting on their agile transition, they need to be careful in order to be successful: agile is not about practices, but about principles, values and mindset. If the mindset isn't well understood and adopted, teams will likely be ineffective.

The agile mindset is more effective than the traditional mindset. The differences derive from the beliefs about employee intention and motivation (Theory X vs. Theory Y), area of focus (internal vs. external) and the way systems are designed (mechanistic vs. systems thinking).

In order to shift to an agile way of thinking, an organization's members have to learn more about the intentions of the techniques, engage in dialogue at all levels, critically analyze their beliefs and test new theories.