

Why Agile transformations fail

And what education has to do with it

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A decorative light blue triangle is located in the bottom right corner of the slide, pointing towards the top right.

What is Agile?

It's a way to organise the activities of people who collaborate to create software products or any outcome that requires intellectual work.

The latter is complex and demands creativity.

COMPLEXITY

CREATIVITY

How do you start working the Agile way?

It's a long process with obstacles on the way.

UNDERSTANDING

To learn about this new way to work is not enough.

You have to understand the reasons behind it.

EXPERIMENTATION

Then you also have to make your own experiments to confirm, or maybe disconfirm, that Agile improves results.

The problem with Agile

It's that Agile requires a deep cultural change that often meets hard resistance.

**DEEP
CULTURAL
CHANGE**

RESISTANCE

Resistance to
change

Why do we resist change?

If the Agile way to work produces better results, why do we resist changing our ways?

Why do we even disfigure Agile making it seem what it is not? By doing so we cut down our odds, we shoot ourselves in the foot.

**WHY
DO WE
RESIST?**

There may be many reasons

There may be many reasons for which we may resist change and refuse to adopt Agile.

I'm going to talk about one of them.

**I'LL TALK
ABOUT ONE OF
THE REASONS**

Education is against Agile

A reason for which Agile transformations fail

One of the reasons behind many failed Agile transformations is that our education instills in us from a young age a way to organise activities that is the opposite of the one Agile promotes.

**EDUCATION
AND AGILE
ARE IN
CONFLICT**

The conflict

There is a conflict between what education teaches us and the Agile way to do things.

Who wins the conflict?

**WHO WINS
THE
CONFLICT?**

Who wins the conflict?

Some of us realise that the way education organises learning is wrong and reject it. They look for better ways when, later in life, they organise their own activities or the ones of others.

Others will stick with the education's way and will reject any evidence that the Agile way is better. They may even refuse to try to understand Agile.

**SOMETIMES
EDUCATION
WINS,
SOMETIMES
AGILE DOES**

How to know if an Agile transformation will succeed?

If a company's leadership has no intention to question their education, it may be better not to waste time trying anything Agile.

**YOU NEED LEADERS WHO
ARE WILLING TO
CHALLENGE THEIR
EDUCATION**

You have to read between the lines

Leaders may declare that they love challenges, then, when push comes to shove, they backtrack.

**READ BETWEEN THE
LINES**

What about the power of habits?

Whatever change people want to make in their lives, they will always have to deal with the power of habits.

Habits may defeat your attempts to change even if you make a large number of them.

**HABITS MAY DEFEAT THE
BEST INTENTIONS**

Education vs Agile

Let's start!

I'm now going to show how education and Agile are often diametrically opposite.

**AGILE AND EDUCATION
ARE DIAMETRICALLY
OPPOSITE**

Trust

Trust is fundamental in Agile

Agile is about dealing with complex, uncertain tasks that require creativity.

No predefined working process can be used in this situation.

Managers have to trust workers with figuring out what should be done in every specific situation.

**TRUST IS A MUST WHEN
TASKS ARE COMPLEX
AND UNCERTAIN**

Schools don't trust children

Schools don't trust children with learning.

Children have an insatiable desire to learn.

They would dismantle the planet and rebuild it just to know what it's made of.

They learn to speak just listening to their parents and self-correcting their mistakes.

**CHILDREN ARE BORN
LEARNERS**

Schools don't trust children

Schools stuff children's minds with knowledge and just check that the knowledge is there. To a child that knowledge may be meaningless, but schools don't care.

They don't trust children with finding the meaning of things at their own pace.

**TEACHERS THINK THAT
MEANINGLESS LEARNING
IS FINE**

Psychological
safety

Psychological safety is needed for Agile to happen

When tasks are complex and uncertain, we need to feel free to make experiments that may fail.

If failure terrifies us, we can't make any experiment.

We need psychological safety.

**PSYCHOLOGICAL SAFETY
IS NEEDED WHEN TASKS
ARE COMPLEX AND
UNCERTAIN**

Learning is the most uncertain and complex activity humans perform

To learn is to be very creative. It's to invent meaning where, in the eyes of the student, there is none.

When you see no meaning in something, for you that thing is complex and uncertain. It will become simple and certain later.

**LEARNING IS COMPLEX
AND UNCERTAIN**

To learn, children need psychological safety

To make learning easier, children need to feel safe.

They need to know that no bad grade will strike them if they make mistakes or find a subject particularly hard to grasp or incompatible with their predispositions.

**CHILDREN NEED TO
FEEL SAFE**

No psychological safety at school

Yet schools make learning harder denying children the psychological safety they need.

Children are supposed to feel scared all the time and make many times more effort to learn than it would take in a safe environment.

**SCHOOLS DENY
CHILDREN
PSYCHOLOGICAL SAFETY**

Deadlines

There is no concept of deadline in Agile

When tasks are complex and uncertain, we need to focus on figuring out what the right thing to do is.

Deadlines distract us from keeping this focus.

We start to run and don't stop to think about what we are doing.

**DEADLINES DISTRACT US
FROM FIGURING OUT
THE RIGHT THING TO DO**

Deadlines are a statement of mistrust

If we set a deadline, we are saying that we don't trust people with figuring out what needs to be done.

We don't think they will take the time they really need to build what has to be built.

**DEADLINES CONVEY THE
MESSAGE: "WE DON'T
TRUST YOU"**

Agile is about trust

Agile needs trust to happen, it's incompatible with the mistrust deadlines imply.

**AGILE IS ABOUT TRUST,
DEADLINES SUPPRESS IT**

Schools are full of deadlines

Homework is due by a given date. Exams have to be taken on a specific date.

There are even surprise deadlines students are supposed to be constantly scared of: “Today I will question one of you at random.”

**SCHOOLS ARE FULL OF
DEADLINES**

Command and control

Agile is about self-organisation

When tasks are complex and uncertain, we don't know if rules that worked somewhere at some time will work in the specific context we are dealing with.

We need to invent our own rules and experiment to see if they are useful.

We have to be free to discard any rule that serves no purpose.

**AGILE IS
SELF-ORGANISATION**

Schools are control freaks

Schools don't trust students and often want to control even aspects of school life that are totally unrelated to learning.

There are schools where students are not allowed to get their favourite haircut.

**SCHOOLS ARE CONTROL
FREAKS**

Rules

Agile team members make their own rules

Teams that really implement Agile make their own rules.

**AGILE TEAMS MAKE
THEIR OWN RULES**

Teachers find the idea of letting students make their own rules terrifying

At school, teachers can't imagine letting students make their own rules.

They find the idea terrifying.

**STUDENTS ARE NOT
TRUSTED WITH MAKING
THEIR OWN RULES**

Failure

Agile has no concept of failure

Agile has no deadlines, you can't fail to meet one.

If you build a piece of software and discover that it's not the right thing to do, you didn't fail.

You were successful discovering a wrong thing to do. Now you have the information you need to move on to the next experiment.

**YOU CAN'T FAIL
DOING AGILE**

Schools punish failure

If you fail at school, you get punished.

If you can't learn the prescribed quantity of notions within the required timeframe, you are in deep trouble.

**NO FAILURE
ALLOWED AT
SCHOOL**

Sticks and
carrots

Sticks and carrots deny you can understand

Sticks and carrots enforce behaviour and deny that people can figure out why they do what they do.

People are not trusted with experimenting and discovering the best solution to a problem.

**STICKS AND
CARROTS MAKE US
STUPID**

Agile is incompatible with sticks and carrots

Nothing Agile can happen in a workplace where managers use sticks and carrots.

The scientific approach to find solutions is incompatible with sticks and carrots, but it's the approach Agile relies on.

**NO STICKS AND
CARROTS IF YOU
WANT TO BE AGILE**

Schools know nothing better than sticks and carrots

Schools use sticks and carrots extensively. They don't allow students to understand.

**SCHOOLS ARE ALL
ABOUT STICKS AND
CARROTS**

Creating
knowledge

Agile is about creating new knowledge

Agile wants us to create knowledge that is new and that is adapted to the specific case.

We are free to discard old knowledge that is no longer useful and make experiments meant to produce new knowledge.

How much knowledge we create is not important.

**AGILE IS ABOUT
CREATING
SPECIFIC, ADAPTED
KNOWLEDGE**

Schools are about quantity

At school, you are not supposed to create anything new.

It's presumed that you learn a prescribed quantity of old notions.

**SCHOOLS ARE
ABOUT QUANTITY**

Schools don't teach you how to create ad-hoc knowledge

Schools standardise the knowledge in your mind.

They don't teach you how to deal with uncertainty.

They stifle your critical sense and discourage the creative discovery of better solutions.

**SCHOOLS
STANDARDISE**

Deep knowledge

Agile is about deep knowledge

To really achieve agility, you need a deep knowledge of the system that produces software or any other knowledge-intensive result.

**YOU NEED DEEP
KNOWLEDGE OF THE
SYSTEM**

Schools ignore what has been discovered about the process of learning

There is an impressive body of knowledge produced in the last 60-70 years about the process of learning. Schools ignore it completely.

**SCHOOLS IGNORE
ALL KNOWLEDGE
ABOUT HOW
CHILDREN LEARN**

Collaboration

Agile is about collaboration

The Agile approach comes from realising that the old way to manage tasks is no longer appropriate.

It's no longer possible to split tasks into subtasks and assign them each to a worker.

Results come from collaboration.

**RESULTS ARE FROM
COLLABORATION**

Agile is about collaboration

If there is a problem, to single out a responsible and punish them is no longer appropriate.

The root causes of the problem have to be found.

**ANALYSIS AND
DIAGNOSIS ARE
REQUIRED**

Schools ignore collaboration completely

Schools don't train students to collaborate.

**SCHOOLS IGNORE
COLLABORATION**

Conformism

Agile is about non-conformism

Agile needs non-conformism because variable and volatile situations need different points of views and the ability to discover original solutions.

It's no longer realistic to expect to solve a problem using solutions that worked somewhere else. One-size-fits-all approaches don't work any more.

**AGILE IS
NON-CONFORMIST**

Schools want students to conform

Schools are less interested in teaching than they are in enforcing conformity.

Original, improved solutions are discouraged in favour of the “right” one.

**SCHOOLS WANT
STUDENTS TO
CONFORM**

Self-organisation

Agile teams are self-organised

Agile teams organise their own work interacting tightly and directly with the end user.

The absence of middlemen makes communication more efficient, less prone to distortions and faster.

**AGILE TEAMS
INTERACT DIRECTLY
WITH THE END USER**

Agile teams are self-organised

Agile teams take advantage of the direct knowledge they have of the product, the user's needs, the technologies, the level of uncertainty, and the priorities.

They use this knowledge to organise their work more effectively than others could do not having the same knowledge.

**AGILE TEAMS TAKE
ADVANTAGE OF
THEIR DEEPER
KNOWLEDGE**

Self-organisation is unknown at school

There isn't even a hint of self-organisation at school.

Schools produce people who don't have the faintest idea of what self-organisation may be about.

**NO
SELF-ORGANISATION
AT SCHOOL**

Understanding

Agile is about understanding

Agile teams write code first of all because they want to create something they can use as a conversation starter.

They will talk with the end user and try to understand their needs.

**AGILE TEAMS NEED
TO UNDERSTAND**

At school, to understand is optional

At school, students don't have to understand.

To repeat like parrots what they are supposed to know is enough.

**NO
UNDERSTANDING
NEEDED AT SCHOOL**

Doing the right
thing

Agile is about doing the right thing

The Agile strategy to achieve results has nothing to do with quantity or even quality.

It's about figuring out what is the right thing to do to meet users' needs.

To focus on quantity or quality distracts the team.

**AGILE IS ABOUT
DOING THE RIGHT
THING**

Agile is about doing the right thing

By doing the right thing, Agile teams save time as well because to produce the wrong thing would be a waste even if quality and quantity were well taken care of.

**QUALITY AND
QUANTITY ARE
POINTLESS IF THE
RESULT IS WRONG**

Schools are about quantity

Schools are only concerned with quantity.

What matters is how much stuff they manage to cram in students' minds even if they didn't understand it.

**QUANTITY OF STUFF
PUSHED INTO STUDENTS'
MINDS IS THE ONLY
MEASURE OF SUCCESS AT
SCHOOL**

Strategic
knowledge

Agile is about generating strategic knowledge

When working the Agile way, you may need to produce small quantities of knowledge that is strategic and may save the project.

**AGILE IS ABOUT
PRODUCING SMALL
AMOUNTS OF
STRATEGIC
KNOWLEDGE**

Schools are about filling students' minds to the brim

Schools are only interested in loading students' minds with knowledge they may even forget after an exam.

**SCHOOLS DON'T TEACH
HOW TO IDENTIFY
STRATEGIC KNOWLEDGE**

Improvement

Agile is about improving

Agile is about improving the way we work and solve problems.

**AGILE IS FINDING
NEW AND BETTER
WAYS TO WORK**

Schools discourage improvement

If you, at school, find a new solution to a problem, but it's not the "right" solution you find in a textbook, you get punished.

**NO IMPROVEMENT AT
SCHOOL, ONLY THE SAME
OLD, SAME OLD**

Speaking up

Speaking up in an Agile team is required

If you work in an Agile team, you know that you are paid to speak up.

If you spot an issue, you have to tell everyone.

**SPEAKING UP IS
ENCOURAGED IN AN
AGILE TEAM**

Speaking up in an Agile team is required

When you speak up, no-one will try to silence you.

Everyone will want to listen to you and understand your concern.

**NO-ONE WILL
SILENCE YOU IN AN
AGILE TEAM**

Speaking up is forbidden at school

None of your concerns will ever receive any attention at school.

You are better off if you shut up.

**NO ATTENTION TO
YOUR CONCERNS AT
SCHOOL**

Thanks for reading

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