

ThoughtWorks®

Mental Models For Agile Adoption

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A little story about an "Agile" team ...



"Agile teams are hyperproductive! I want a piece of that!"



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But ... ZERO POINTS 😞



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"This Agile thing just isn't working!"

"I could do those tasks far more quickly on my own"

"Do those automated tests really help?
I spend half my time trying to keep the build green ..."



"Agile teams are hyperproductive! I want a piece of that!"

But ... ZERO POINTS ☹

"This Agile thing just isn't working!"

"I could do those tasks far more quickly on my own"

"Do those automated tests really help?
I spend half my time trying to keep the build green ..."

"Can we not just go back to estimates in hours?"



"We do want to be Agile though –
we'll keep doing iterations and stand ups..."



Sound familiar?



Why are we like this?



Blame our Mental Models



Our minds substitute many
details for simple concepts



We make Leaps of Abstraction



Implicit mental models
remain untested



Mental Models
guide our actions



We try to keep our Governing Variables
within acceptable limits



Governing variables
drive
Action Strategies



Actions have consequences –
both intended, and unintended



Agile is counterintuitive

it requires changing our Governing Variables



Aim for perfect requirements before you start
to minimise change later



Aim for perfect requirements before you start
to minimise change later

Write the requirements just before we build it
to allow changes later



Do all the related development tasks together
so they take less time



Do all the related development tasks together
so they take less time

Develop and complete a small piece at a time
so we can deliver working software
and get faster feedback



Have lots of projects on the go at one time
so that we are making progress on lots of things



Have lots of projects on the go at one time
so that we are making progress on lots of things

Have fewer projects on the go at one time
so that they are completed sooner



Developing is mostly typing [code]
so people work faster individually



Developing is mostly typing [code]
so people work faster individually

Developing is mostly problem solving
so two heads are better than one



How Mental Models Affect people
when they start to adopt agile



Argyris & Schön

Theory in Action



Espoused theories Vs. Theories-in-use

[what they say]

[mental models]



Model 1 - Governing Variables

- * Maintain control the situation (unilaterally). Get what you want, achieve your objectives/goals
- * "win, do not lose"
- * suppress negative feelings, such as embarrassment, in yourself and others
- * act "rationally" (suppress or deny emotions).



Model 1

Unilateral Control Model

Closed to Learning



Skilled Incompetence



Learning as
"the detection and correction of error"

where an error is a mismatch between
what was intended and what was produced.



Single loop learning

the 'decision rules' imposed by our mental models

Single Loop Learning



Double loop learning

- requires changing the values and Mental Models that govern theory-in-use



Single Vs. Double Loop Learning



Model 2 - Change defensive routines



Model 1 - Governing Variables

- * Maintain control the situation (unilaterally). Get what you want, achieve your objectives/goals
- * "win, do not lose"
- * suppress negative feelings, such as embarrassment, in yourself and others
- * act "rationally" (suppress or deny emotions).



Model 2 - Governing Variables

- * Everyone is in control
- * Everyone wins
- * [all] feelings are expressed
- * rationality is downplayed



Model 1 vs. Model 2

- * Not a replacement for one another
- * Clearly articulating a position
- * Emphasis on enquiry and test
- * Strong opinions, weakly held



How do we move past Model 1?



Tools and techniques



Create the right environment



"Regardless of what we discover,
we understand and truly believe that everyone
did the best job he or she could,
given what was known at the time,
his or her skills and abilities,
the resources available,
and the situation at hand."



Left hand and right hand columns



Right Hand (what was said)

Details of the conversation

Details of the conversation
as you imagine it may happen



Left Hand (what was thought)

Right Hand (what was said)

How you felt but didn't say

Details of the conversation

Details of the conversation
as you imagine it may happen



Left Hand (what was thought)

Right Hand (what was said)

Barry: How is that presentation preparation going?

Jo: It's going ok

Barry: Can we do a showcase tomorrow?

Jo: That's a bit soon – next week?

Barry: That's fine. I'll set something up for next week



Left Hand (what was thought)

She hasn't shown me anything.
I'm nervous she is wasting
time?

She hasn't done anything at all!

I knew it, I should have done
it myself. Jo is useless!

Right Hand (what was said)

Barry: How is that
presentation preparation going?

Jo: It's going ok

Barry: Can we do a showcase
tomorrow?

Jo: That's a bit soon – next
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Barry: That's fine. I'll set
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Reflection as a tool

- * What has really led me to think and feel this way?
- * What was your intention?
- * What were you trying to accomplish?
- * Did you achieve the results you intended?
- * How might your comments have contributed to the difficulties?
- * Why didn't you say what was in your left-hand column?



Reflection as a tool

- * What assumptions are you making about the other person or people?
- * What were the costs of operating this way
- * What were the payoffs?
- * What prevented you from acting differently?
- * How can I use my left-hand column as a resource to improve our communications?



How the conversation would go....

Barry: How is that presentation preparation going?

Jo: It's going ok

Barry: I'm a bit nervous that the presentation as I've still not seen what you've done

Jo: I know I'm sorry.. It's just that I've been doing a lot of research and not put words down

Barry: Maybe we can pair on it tomorrow and get it done!



Building the capability

1 on 1s

Closing the Feedback Loop

Sharing Left Hand Columns



Mental Models

Surfacing your Mental Models – being aware of them

Testing assumptions

Effectively inquire into other person's Mental Mode



Thanks

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See you at our open space

or

by the ThoughtWorks banner!

