Agile for Anything:

Using examples and analogies from everyday life when coaching an Agile Transformation

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Agile Manifesto & Principles
(Released in 2001)

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

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

That is, while there is value in the items on the right, we value the items on the left more.

- Our highest priority is to satisfy the customer through **early and continuous delivery** of **valuable** software.
- **Welcome changing requirements**, harness change for the customer's competitive advantage.
- Deliver working software frequently, with a **preference to the shorter timescale**.
- Business people and developers must **work together daily** throughout the project.
- Build projects around motivated individuals. **Give them support and** <u>trust</u> them to get the job done.
- The most efficient and effective methods of conveying information is **face-to-face conversation**.
- **Working software is the primary measure of progress.**
- The sponsors, developers, and users should be able to **maintain a constant pace indefinitely**.
- Continuous attention to **technical excellence and good design** enhances agility.
- **Simplicity**--the art of **maximizing the amount of work not done**--is essential.
- The best architectures, requirements, and designs emerge from **self-organizing teams**.
- At regular intervals, the team **reflects** on how to become more effective, then **adjusts** its behavior accordingly.

http://agilemanifesto.org/

Scrum

Events
- Sprint Planning
- Daily Standup
- Sprint Review
- Retrospective

Values
- Focus
- Courage
- Openness
- Commitment
- Respect

http://www.scrumguides.org/

This must be a transformation. The Agile Manifesto, Agile Principles, and Scrum Values must become more than just words on paper.

Every person on the team should adopt them into their ways of thinking, working, and interacting with each other.

As teams mature, they continue to have "ah ha!" moments, as they realize the true meaning of the words.

Lean Principles

- Optimize the whole
- Eliminate waste
- Build quality in
- Deliver fast
- Create knowledge
- Defer commitment
- Respect people

http://www.poppendieck.com/

Kanban

- Start where you are now
- Visualize the work
- Limit work in progress (WIP)
- Agree on Policies
- Observe and measure
- Experiment to improve

https://leankanban.com/shop/kanban-book/

SAFe Principles

#1-Take an economic view

#2-Apply systems thinking

#3-Assume variability; preserve options

#4-Build incrementally with fast, integrated learning cycles

#5-Base milestones on objective evaluation of working systems

#6-Visualize and limit WIP, reduce batch sizes, and manage queue lengths

#7-Apply cadence, synchronize with cross-domain planning

#8-Unlock the intrinsic motivation of knowledge workers

#9-Decentralize decision-making

#10-Organize Around Value

http://www.scaledagileframework.com/

Agile Marketing Manifesto
(6/11/2012)

We are discovering better ways of creating value for our customers and for our organizations
through new approaches to marketing. Through this work, we have come to value:

Validated learning over opinions and conventions
Customer focused collaboration over silos and hierarchy
Adaptive and iterative campaigns over Big-Bang campaigns
The process of customer discovery over static prediction
Flexible vs. rigid planning
Responding to change over following a plan
Many small experiments over a few large bets

- Our highest priority is to satisfy the customer through early and continuous delivery of marketing that solves problems
- We welcome and plan for change. We believe that our ability to quickly respond to change is a source of competitive advantage
- Deliver marketing programs frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale
- Great marketing requires close alignment with the business people, sales and development
- Build marketing programs around motivated individuals. Give them the environment and support they need, and trust them to get the job done
- Learning, through the build-measure-learn feedback loop, is the primary measure of progress
- Sustainable marketing requires you to keep a constant pace and pipeline
- Don't be afraid to fail; just don't fail the same way twice
- Continuous attention to marketing fundamentals and good design enhances agility
- Simplicity is essential

http://agilemarketingmanifesto.org

Now that Agile has been around for software development for quite awhile, other areas have joined in with their own adaptation of the manifesto and principles

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Manifesto for Agile HR Development

We are uncovering better ways of developing
an engaging workplace culture by doing it and helping others do it.
Through this work we have come to value:

Collaborative networks over hierarchical structures
Transparency over secrecy
Adaptability over prescriptiveness
Inspiration and engagement over management and retention
Intrinsic motivation over extrinsic rewards
Ambition over obligation

That is, while there is value in the items on the right, **we value the items on the left more**.

We follow these principles:

- Support people to engage, grow, and be happy in their workplace.

- Encourage people to welcome change and adapt when needed.

- Help to build and support networks of empowered, self-organizing and collaborative teams.

- Nourish and support the people's and team's motivation and capabilities, help them build the environment they need, and trust them to get the job done.

- Facilitate and nurture personal growth, to harness employee's different strengths and talents.

https://www.agilehrmanifesto.org/

Now that Agile has been around for software development for quite awhile, other areas have joined in with their own adaptation of the manifesto and principles

Project Constraints

Projects usually expand time and budget to deliver the scope

Budget · Time · Scope
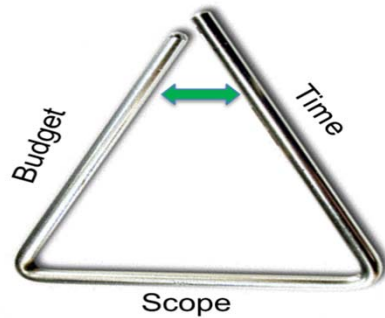
Agile fixes the time and budget, scope is variable

Scope · Budget · Time

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The open-ended musical triangle is used to show the Iron Triangle, because in waterfall, time and cost are normally expanded to keep all of the scope (even when it is wasted). Although you may cut scope later, you have spent a lot of money to write all of those requirements, which are invariably outdated by the time they are either developed or cut.

In Agile, time and cost are normally fixed and only the scope that delivers the most business value is delivered, you have a fixed amount of time and money, fill your basket with the features that will provide the most business value. You don't waste time writing requirements that will not be used, or are written when the cone on uncertainty is so wide that they are not useful.

When we bought our mid-century modern house circa 1963, in 1992; when I knew the least about it my top priority was to remodel that George Jetson's kitchen.

We moved in in April of 1992, we had a spring cold spell and discovered the blower motor in the furnace was bad, so kitchen moved to #2 on the list and furnace moved to #1. Then the basement flooded and lots of repairs had to be made.

As is the case with 30-year old houses, everything started to go, one after the next; it got warm and the AC went out, the single-pane windows were losing lots of energy, the chimney leaked, the water heater went out, the roof leaked…. We sold the house in 2010 and were able to boast in the real estate listing that the house had an original mid-century modern kitchen (love those pulls in the middle of the doors). The kitchen project had a "go" decision, but for 18 years, it never made it to the top of the list, it remained at #2.

Make The Work Visible:
Saturday Chores

Every Saturday morning one of my clients has coffee with his wife and they discuss what they will do that day, and she makes a list.

One Saturday he spent most of the day raking leaves, by himself. She came outside once or twice, but did not stay to help.

At the end of the day she wondered why he spent so much of the day raking, and he wondered why she didn't help him… she said that raking leaves was not on the list, he looked and sure enough, it wasn't there.

My recommendation was to make the work visible to everyone, instead a list on a piece of paper in possession of one person, put stickies on the wall, where they could both see them, reorder them as they discussed the priorities for the day, and remove them as they were completed.

This helps to clearly distinguish the things we actually agree to work on, versus the things we just talk about.

Build a Road – Iterative & Incremental

- When do we see value?
- When will we discover additional needs?

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Taken by itself, iterative means to iterate over something, to make changes to it over multiple sessions or fundamentally to redo something many times making it better each time. This is also known as a "correcting strategy"

Agile combines both iterative and incremental together.

The cow path is valuable, to get the cow from the farm to the grazing area
The farmer needs to get there, too, with a vehicle, so it becomes a gravel road
The neighbors find the road useful and as it gets more traffic, it is paved
There is a national park back in there, so it becomes a highway, the highway can be enhanced with guard rails, rest areas, gas stations, restaurants, etc.
Once it is built, it must be maintained or it loses it's value

Decorating a Church Using Scrum

My client, Lauren, told his wife about the Agile Transformation. She was in charge of decorating their Church for Christmas and decided to use Scrum. She wrote out the user stories and then had the decorators break into teams of two or three people, each team took a story, tasked it out and then worked together on the story until it was done, before selecting another one.

The teams quickly self-organized and got to work. A friendly competition developed between the teams decorating the left and right sides of the church. They completed the decorating the whole in one hour. In previous years, with one person in command, giving assignments to individuals, it took 4 hours.

Does having a task board mean you are doing Kanban?

The driver of the tractor-trailer said he followed his GPS

Having a tool is not enough, you need to have explicit policies…

…and obey them

This is a real news story, the truck driver had the tool, his GPS, and followed it, in spite of the sign telling him that trucks were prohibited. The truck got high-centered on the railroad track and was hit by a train.

Having a tool is not enough, you need to know the rules of the road, and OBEY them!

http://www.wsbtv.com/news/local/gwinnett-county/train-truck-collide-in-norcross/467528268

Stacking Lumber – A lesson in Lean

Andy and his woodworking buddy, John, were going to stack and sticker the lumber from a cherry tree we had cut down. They were going to use PVC pipe for the stickers, to put between the wood so air can circulate and dry it.

They started by "estimating" how many PVC pipes they would need. They used paper, pencil, calculator, and tape measure. To me, any "estimate" that requires this many tools is NOT an estimate; it is an exactimate, and usually wrong. They decided how may pipes they would need, and sent me off to the store to buy them. It looked like way too many to me, but I thought I could always return the extras.

In the batch of pipe I bought there was one pipe of a larger diameter, the guys decided to keep that pipe and use it at the bottom of the stack.

John went to the shop and was cutting up the pipes.

I went out to the barn to help Andy start stacking the wood, but, because they had set up the saw to cut the smaller diameter pipes, and they wanted to use the bigger pipe at the bottom of the stack, we had to wait until after John had cut up all of the pipe, before they adjusted the saw to cut the one bigger pipe (they refused to ignore the sunk cost of setting up the saw when they discovered the larger pipe).

So, we stood around for an hour doing nothing, while John cut up ALL of the pipes (big batch, no WIP limit on pipes being cut delays downstream work).

Once we started stacking the lumber, it was apparent that there were way too many stickers, but by then, all of the pipes had been cut up and so none of the extra could be returned (lots of waste; time cutting up pipes that were not needed and money on pipes I could not return).

After the stack was complete, they needed to weigh it down, so that the wood would not warp as it dried. As they thought about what they needed to go buy for weight, I recommended using the stack of empty plastic cat litter buckets we had, filled with water.

Andy asked if I wanted to carry buckets of water up from the shop to the barn.

I said no, I would bring the buckets up empty, and then use the hose to fill them when they were in place (simplest thing that could possibly work).
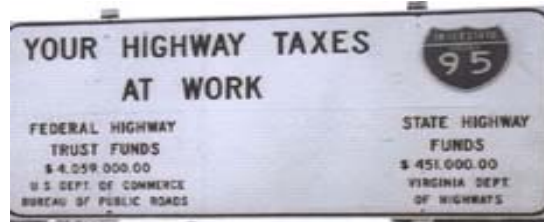
Play multi-tasking game or show the Small Batch video here.

Trying to maximize the use of every minute of every person's time is as unproductive as making use of every inch of pavement on the highway.

Play multi-tasking game or here.

How many of the people in these cars is saying, "I am so glad that every penny I spent on building this highway is in use!"?

Do you think that all of these people are traveling at or near the speed limit, arriving quickly at their destination, as is the purpose of highways? Should the goal be to have every possible bit of road occupied by a car (or every second of an employees time be accounted for on project assignments)?

If there was slack space between the vehicles, could they move more quickly down the road?

Your goal should be to delight your customers, not to fill up every minute of your employee's time.

Cost of Task Switching:
Shoeshine

My colleague, Dan, has his shoes shined along his travels, it normally takes 8 minutes for a typical shoe shine if done 1 customer at a time
Doing 3 together took 30 minutes, so extra 2 minutes per person due to context switching
First person in line got done in 30 minutes instead of 8
Second person in line got done in 30 minutes instead of 16
Third person got done in 30 minutes instead of 24
Delaying value to the customer for the convenience of the person doing the work (only have to get the polish out once, only have get the brush out once, only have to get the wax out once…).
It should never be about the convenience of the developers.

See also https://en.wikipedia.org/wiki/Continuous_partial_attention

Bug or Feature?

Several years ago, my sister-in-law, who lives in Wisconsin, bought a beautiful purple Chevy Malibu car, in the winter.

Scenario 1 – New Functionality
When summer came, she realized that the car did not have air conditioning. She was not thinking about this feature in February, it was below freezing when she bought the car. Now it is hot outside and she wants to be cooler. She cannot take the car back to the dealer and ask them to "fix" the air conditioner, because it does not exist, so it cannot be defective.

Options:
- Purchase and after-market air conditioner (new story or feature; imperfect but cost-effective solution)
- Trade the care in on a new model that has an air conditioner (new story or feature; completely reengineer the component, perfect but most expensive solution)
- Roll down the windows and live with it (the car works as is, air conditioning is a "want" not a "need" and the ROI does not justify the cost of the other options)

Scenario 2 - Defect Found Not Related to Current Sprint
She bought the car with factory installed air conditioning, but it was winter when she purchased it, so she did not attempt to use the air conditioner until July. She went out to run errands (the current sprint) ; buy groceries, fill the car with gas, and wash the car. During the course of completing these user stories, she discovered that the air conditioner did not work. Nothing about putting groceries in the trunk, filling the gas tank, or washing the car broke the air conditioner, but while completing these activities she discovered the defect. The defect may have been introduced at the factory when the car was being built, or something may have damaged a hose or wire in the course of using the car that caused the air conditioner to stop working.
Enter a defect in the backlog to be prioritized and planned

Scenario 3 - Defect Escaped the Sprint
She bought the car with factory installed air conditioning. While test-driving the car she tried out the accelerator, breaks, lights, horn, radio, electric windows, seat adjustments, mirror adjustments, heater, and air conditioner. The air conditioner did not work properly. The dealer offered to order the necessary parts to fix it, and would do the repair when she brought it in for the first oil change. Since it was February, she did not immediately need the air conditioner but she did need a new car. She agreed to accept the car with the defect. When she scheduled the next maintenance, the defect would be fixed.
Accept the story and enter a defect in the backlog to be prioritized and planned

When testing people often report something that does not exist as a bug. How can something that does not exist be defective?

Agile Works for Anything

From this
Using this
To this
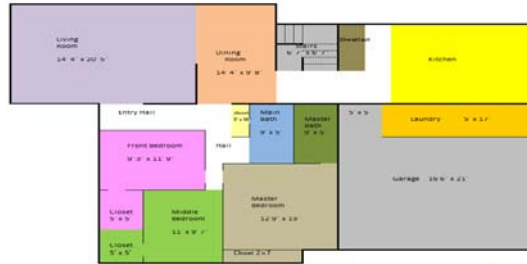
I remodeled my house with a floor plan drawn in Excel and a task board on the kitchen wall.

My contractor initially thought I was crazy, but in the end said it was the least stressful project they had ever done.

Contractor quickly learned that, "Done, but…" meant not done
The basement wiring is done, but the outlet covers are not on yet; means NOT done
The bedroom is done, but we still need to touch up the paint on the doorframe; means NOT done
If you have to wait for paint to dry, pick something from lower down on the list that can be started AND FINISHED while the paint dries.
The whole house was done in 4 months, with no outstanding punch list.
By not allowing the contractors to do all of the demo up-front, I had to pay $225 per month to keep the dumpster for the 4 months instead of 1, but the extra $675 was worth it to mitigate the risk of the job ending prematurely and me ending up with a worthless house, and also preserve my option to stop at the end of any room.

Inspect does not work without Adapt:
Agile Manifesto – Principle 12 "At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly."

I was a ballet dancer, then a soldier, weighing about 100 lbs.; over the years I gained weight. I travel for a living and hotels have a lot of mirrors, so I frequently reflect on this situation.
Lean, Agile, Scrum, and SAFe all advocate inspect and adapt.
Over the years I did a Ishikawa or 5-Whys analysis to figure out why I had put on weight, and determined that the root cause was that I ate too much, and did not exercise enough.
Then I did a Pareto Problem solving workshop and determined that if I just ate less dessert and walked a little more, I would loose weight. I did not need to join a gym, buy workout clothes or equipment, or eat special food. Just eat less and walk more; 80% of the results come from 20% effort.
But for more than 10 years, I didn't actually take any action. My job is stressful, I like dessert, and I didn't feel like going for walk. So not only did I not loose weight, I kept gaining weight. Reflecting, Root Cause Analysis, and Problem Solving had no effect, I actually had to take ACTION to get the benefit out of the first three steps!
In order for Retrospectives to be effective, you not only have to **Inspect**, but also **Adapt**.
Finally, one day I decided to take action. I started eating less of the foods I normally eat, and started walking through the airport instead of taking the moving sidewalk. Lost about a pound a week; in 6 months lost 30 pounds and 5" in the waist of my jeans. Small effort, big result.

How Long Will You Need Agile Coaching?

boys start playing football in elementary school, they play through jr. high, high school, and college. Now they are paid millions of dollars to play football, and yet they still have coaches! Why, haven't they learned the rules yet? The players change, the opponents change, the rules change, and getting a group of individuals playing together takes constant coaching.

Even individual sports, think about tennis players, golfers, or figure skaters who have decided that they don't need coaching any more.

Coaching does not need to be external consultant coaches, you can develop a CoP and coach each other. We all get sloppy in our practices, team members come and go and that changes the team dynamics, Agile practices evolve, and change is hard it's easy to slip back into old habbits with new names and think we're doing the right thing.

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Retired Agile Transformation Coach implemented Agile practices spanning the enterprise; coaching and training on Agile principles and methodologies; including Enterprise Business Agility Strategy, Scrum, Kanban, and the Scaled Agile Framework (SAFe).

Experienced with a wide variety of industries including banking, distribution, financial, government, hospitality, insurance, investments, manufacturing, military, publishing, and retail.

- Cincy Deliver 2021 speaker,
  "Agile for Anything"
- Cincy Deliver 2019 speaker,
  "Why Business Agility? …because the world is moving too fast not to be Agile!"
- Agile Cincinnati 2/2018 lightning talk, **"Degrees of Different"**
- DC Scrum User Group 11/2014 speaker,
  "Agile Transformation: Nine Lessons Learned (So Far…)"
- Agile Alliance – **Agile 2012** speaker,
  "Adopting *CMMI*® into Your Scrum Methodology"
- PMI-Greater New Orleans **Professional Development Day 2011** speaker,
  "Scrum Overview"
- PMI **Agile Item Writing Project for PMI-ACP**
  Certification Examination, 2011

Now that I'm retired, I'm letting all of my certifications expire, and I'm baking cookies instead ☺ I'm continuing to evolve