



Welcome!

Thank you for coming to the last session of Drupal Gov Con.



My name is Noah Wolfe. I've been a web project manager for over a decade and I've worked as a government contractor for 6 years. I have a B.A. in Psychology from the University of Illinois at Chicago. I've worked on Capitol Hill, for a Think Tank, for a philanthropy, for a publicly traded corporation and for a handful of government contractors.



As a government contractor my clients have included: National Institutes of Health, Veterans Affairs, The National Archives and the Centers for Medicare and Medicaid Services.



I'm a certified Project Management Professional. Also known as a PMP. PMP is a well-recognized Waterfall certification. I am also a Certified Scrum Master which is a relatively easy Agile certification to obtain and requires that you learn an incredibly practical, flexible and applicable way to organize your projects. Recently I've become a SAFe 4 Agilist. Which is a Agile/waterfall hybrid that is growing in popularity.



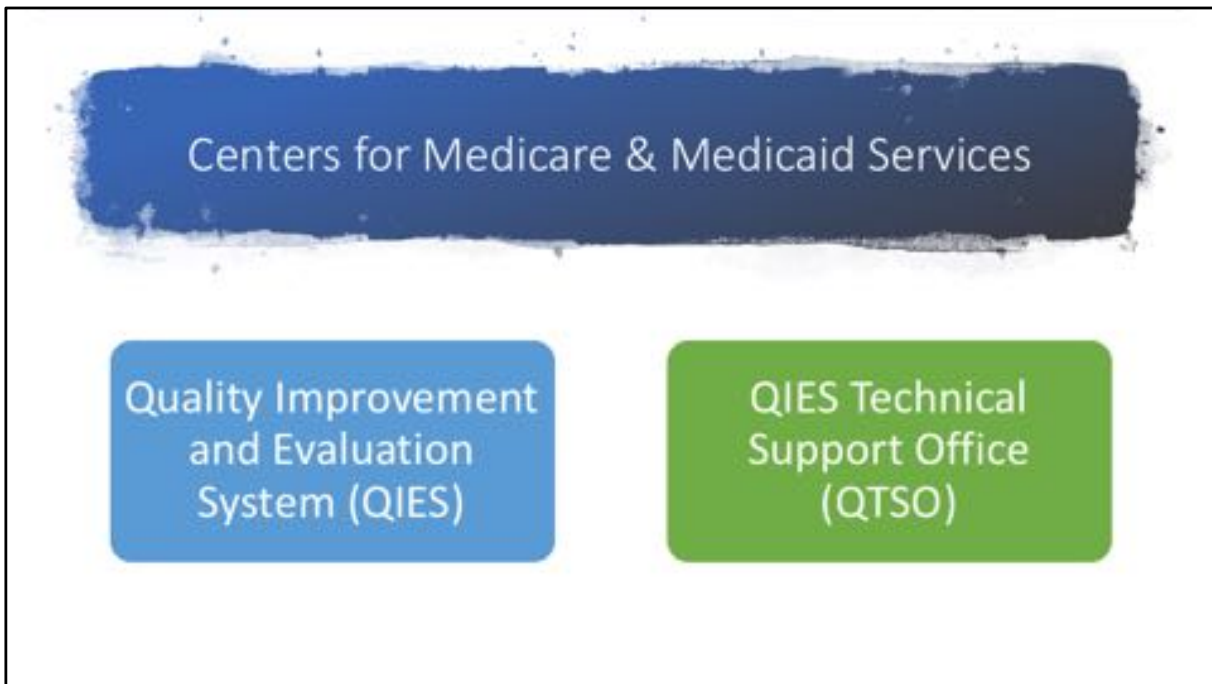
By show of hands how many here are government contractors? How many are government employees?




Fair warning: In this talk I'm generally presenting from the perspective of the contractor. But as much as possible I'll try to speak from a neutral perspective. My intention is that this is for both the contractor and the "govie". As a certified ScrumMaster, Scrum is my agile method of choice. It is also the most commonly used method of agile. So I will be talking about agile mostly through the lens of Scrum but my goal is to use Scrum as an example from which you can extrapolate for whatever process you are using.



Presently I work for TISTA Science and Technology corporation



on a contract for the Centers for Medicare and Medicaid Services. Our project was to take the Quality Improvement Evaluation System's Technical Support Office website



QIES Technical Support Office

[Home](#)
[ASPEN](#)
[LTCR](#)
[QIA](#)
[QIS](#)
[QIES Submissions](#)
[CMS Links](#)
[Education](#)
[NART](#)
[JHVEN / JHVEN](#)
[Hospice](#)
[IRF-PAI](#)
[JHVEN / JHVEN](#)
[LASER](#)
[LTCR](#)
[HDS 3.0](#)
[HDS 3.0](#)
[QASIS](#)
[PIL](#)
[JHVEN](#)
[JHVEN, Swing Bed](#)
[Swing Bed](#)
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Minimum System Requirements for Home Health Agencies, Hospice Providers, Long Term Care Facilities, Inpatient Rehabilitation Facilities and Long Term Care Hospitals.

NEW: 2015 System Requirements (PDF, 6MB) Effective 10/1/2015 - 09/30/2016

[Download](#)

Notice: Home Health Compare Data

(posted 09/29/2015)

Some providers may see small differences between the measure value displayed on Home Health Compare in October and that shown on their previous reports sent out in July, for select measures. This is because measure values were recalculated after the dissemination of the previous reports to include any late or corrected submission received after measure values were initially calculated, for each month during the 12-month reporting period. This recalculation did not affect the Quality of Patient Care star rating, or any of the measures included in its calculation. Going forward, the data values used to calculate measures for Home Health Compare will be updated prior to the dissemination of the previous reports to capture any late or corrected OASIS submissions, and then frozen until display on Home Health Compare. Home Health Compare will continue to be updated on a quarterly basis.

[Download](#)

For all Medicare-Certified Agencies:

(posted 09/22/2015)

There is always time to sign up for Home Health Care CAHPS (HHCaHPS). Please go to the official HHCaHPS website at <https://homehealthcahps.org> to register for HHCaHPS and to authorize your HHCaHPS survey vendor. If you are participating in HHCaHPS, you are strongly advised to regularly check your HHCaHPS reports on the "My HHCaHPS" portal on <https://homehealthcahps.org>. We will begin Star Ratings for HHCaHPS in January 2016. The current October 2015 data in your Previous Report includes Star Ratings for the October 2015 data, but these Star Ratings will not be reported on Home Health Compare in October 2015. Please email hhcaphs@cms.gov with any questions about HHCaHPS.

[Download](#)

Medicare.gov's Availability of Auxiliary Aids & Services

(posted 10/22/14)

For information about the availability of auxiliary aids and service, please visit: www.medicare.gov

CMSNet Information

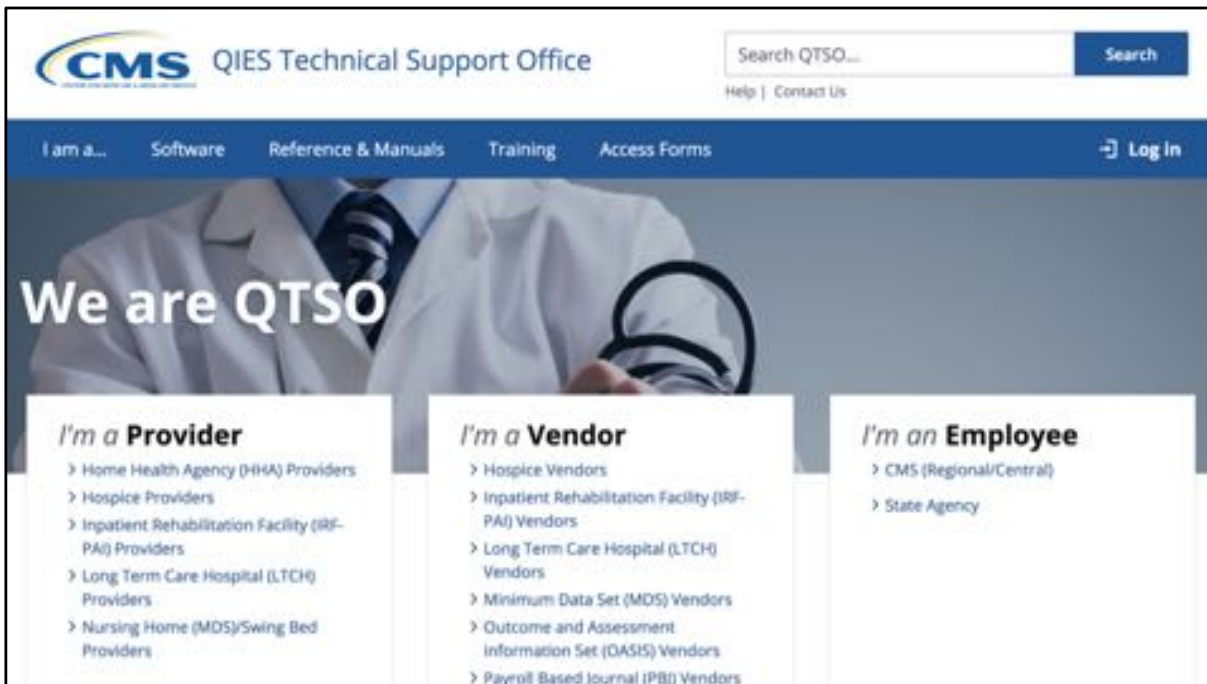
[CMSNet Information](#)
(Direct to access CMSNet Submission Access)

Access Request Information / Forms

All providers must request a CMSNet User ID to access secure CMS sites (e.g., submissions pages / reports) unless an alternate secure connection has been established.

[PSL](#) (Nursing Home Facilities)
[ePOC](#) (Nursing Home Facilities)
[MDS](#) (Nursing Home Facilities)
[QASIS](#) (Home Health Agencies)
[Hospice / IRF / LTCR / Swing Bed](#) (Hospice Providers, Inpatient Rehabilitation Facilities, Long-Term Care Hospitals, Swing Beds)
State and Federal Personnel ONLY (State Agency, CMS RHCRC, ASPEN, AD & VR Users)
[National Data Access Requests](#) NOT for Providers

which, as recently as two weeks ago, was this HTML based site.



Last Thursday it is now this user-based designed Drupal 8 site.

The team I manage self-organizes using Scrum. Though we are already live our Period of Performance does not end until the end of September. We went live with a month and a half left on our contract. We will now be iterating on making the site as accessible as we possibly can and automating as much of our CI/CD process as time will allow.

My team and I put a lot of hard work, effort, and love into this project. But we were also a little lucky in that our client (and CMS in general) is supportive of Agile. That said, there are also an incredible amount of Waterfall requirements built into the systems development life cycle process required by our client. And that paradox is what I'm going to talk about today.

Why does the government so often
ask for Agile but then require
working in a waterfall process?

Why does the government so often ask for Agile but then require working in a waterfall process that runs counter to the agile process they requested?



Have you worked on a government contract where agile methods were requested but you were also required to provide and report on waterfall artifacts?



Waterfall vs. Agile

Today I will talk about the different types of Agile/Waterfall contracts you might work on.

BUT

I'm all about understanding root causes. If you want to understand why your client is structuring proposals this way we need to analyze what is happening here.

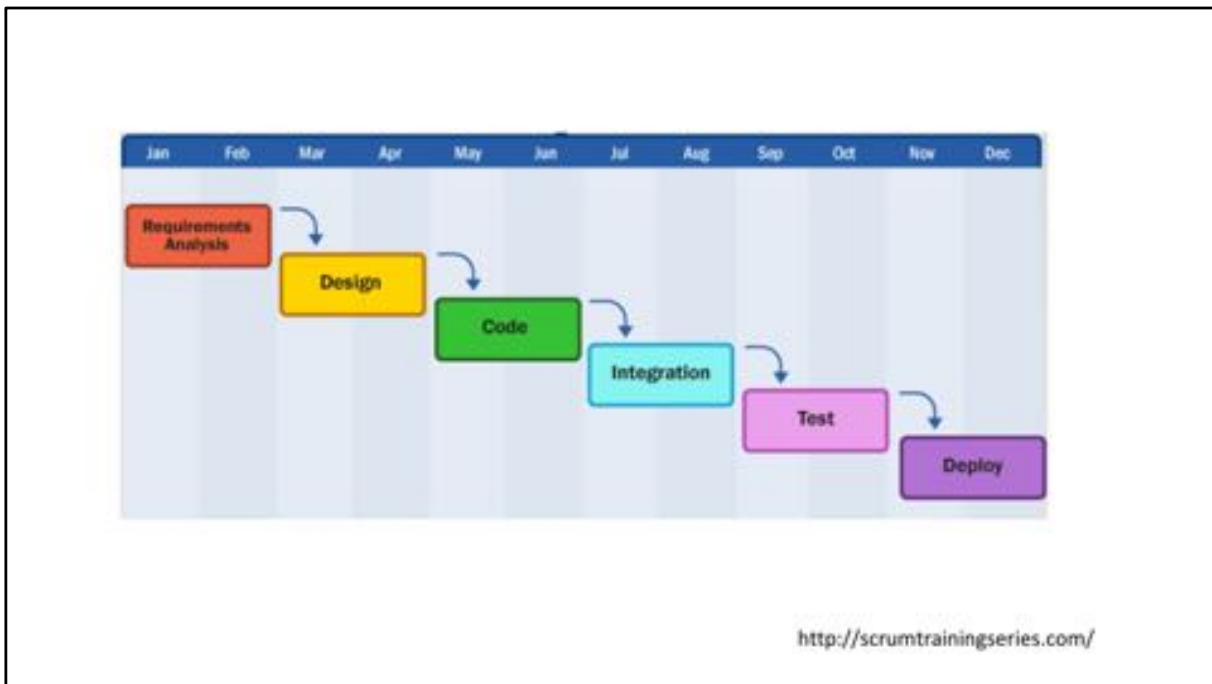
So, before we talk about expectations and strategies for your contract we're going to dive deep.

Quickly, let me broadly and imperfectly define Waterfall and Agile.



Waterfall

Waterfall approaches project management from a relatively linear, sequential design approach. Value is provided at the end of the entire project. There is a heavy focus on up-front documentation, planning and it then follows the plan.



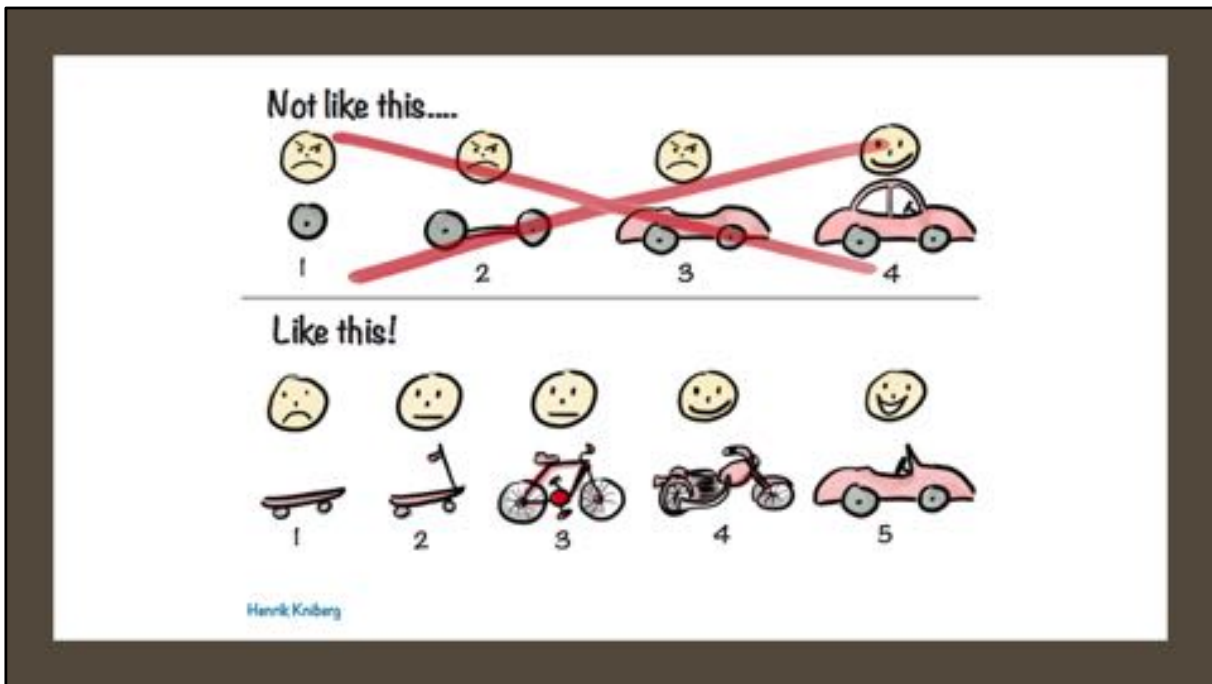
Here is a traditional presentation of waterfall as a process.

It originated in the manufacturing and construction industries; where the highly structured physical environments meant that design changes became prohibitively expensive.

The Waterfall process will typically produce plans, milestones documentation and expected outcomes



In contrast in Agile approaches product development as a process. It anticipates the need to quickly change direction and is designed to adjust on the fly.



The solution is designed and delivered and improved upon in an iterative model.

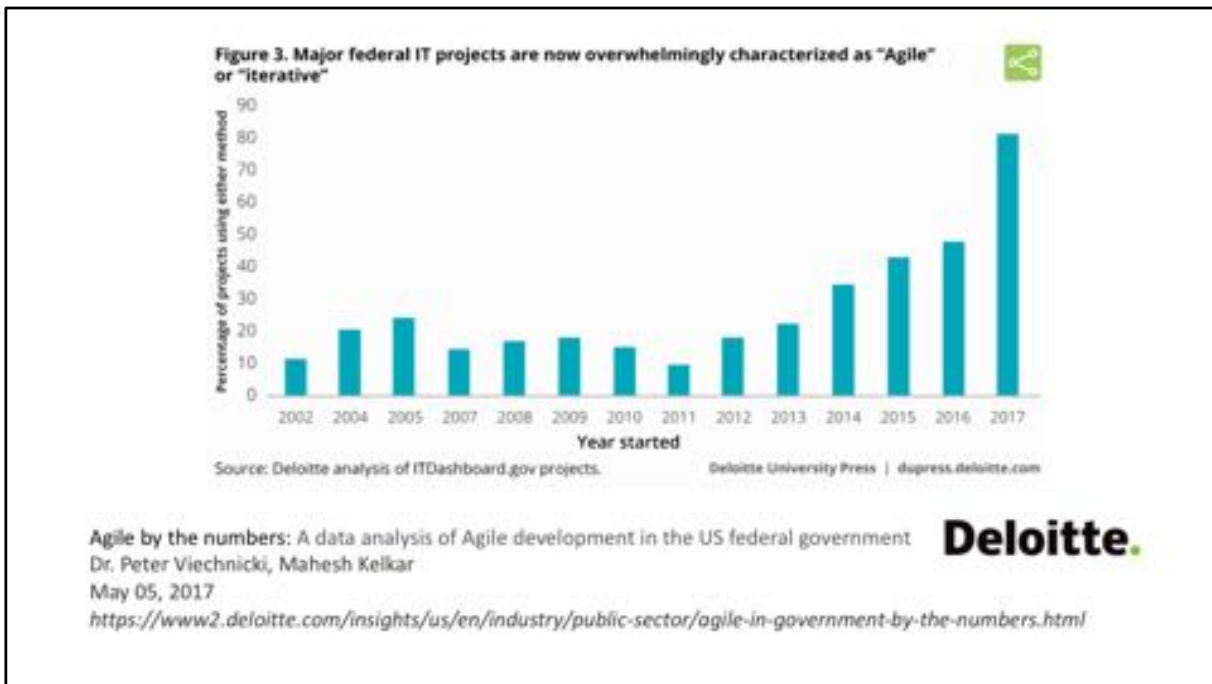
I'm a fan of this image created by Henrik Kniberg which shows the waterfall approach of plan, work sequential and deliver value at the end.

In contrast with agile value is delivered at each stage of development. At each stage, the solution can be evaluated and adjusted if needed.

Agile (generally) originated in the software development industry in many ways as a response to the waterfall methods that were not efficiently supporting software development work.

Agile is a recognized Best Practice

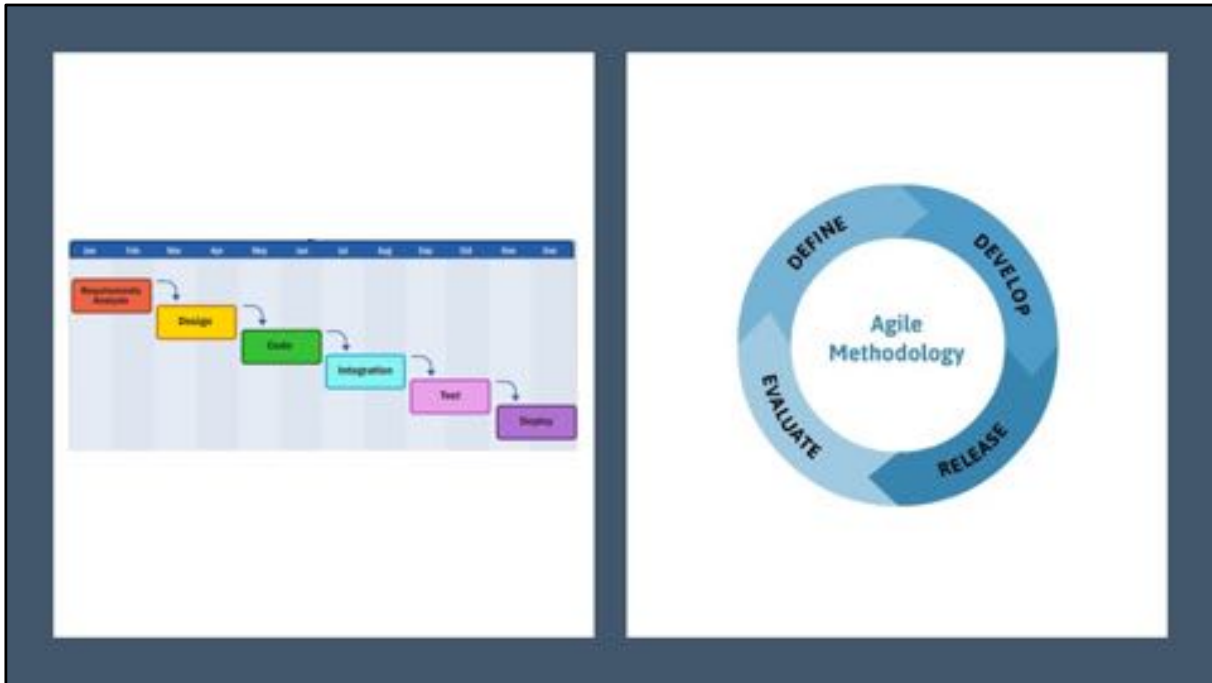
Agile shows up on most of the government RFPs I've seen. It feels like agile is being used more. Is this just my experience or is there a bigger trend? Let's look at some actual data.



An analysis by Dr. Peter Viechnicki, Mahesh Kelkar of Deloitte found that

"in 2011, fewer than 10 percent of major federal IT projects described themselves as "Agile" or "iterative." This number, however, has grown rapidly in the past few years: In 2017, fully 80 percent of major federal IT projects are now describing themselves as "Agile" or "iterative."

The government is overwhelmingly asking for iterative work on major IT projects. Agile is here to stay.



Now you know what I mean when I say agile or waterfall. We've seen where the government is heading with agile but the government has historically been running waterfall.

Let's get back to our problem. If the government is seeing the benefits of Agile and they seem to be adjusting projects to make them more agile friendly (for example the change in project sizes) then why is the government still asking for us to follow classic waterfall practices (which I would argue provide limited value and take away from time that would be better spent building the product).

If agile provides value why are there still waterfall requirements?



Tradition?

Not exactly.

I'm suggest that the reason why your contract asks for both waterfall and agile is?



... the Washington Post.

Or as our President calls it...

“The Amazon Washington Post”

What am I talking about?

Let’s take a step back...



My first job out of college was working on Capitol Hill. I am in DC because I wanted to work on The Hill. When I worked for Senator Chuck Hagel of the Great State of Nebraska on my first day I was handed a document with the title "The TEN commandments of working on Capitol Hill". Naturally, it had eleven commandments on it. I will only talk about the first.

Commandment. Number. One.

"Do NOT put anything in an email that you are not comfortable seeing on the front page of...



the Washington Post.”

Why is this?

The reason for this is if you write something that IS or could be CONSTRUED as wasteful of taxpayer dollars, abusive of power, or otherwise offensive to your boss’s voting constituents ...



your boss could be out of a job.

Which also means that you will be out of a job.



Let's bring this concept closer to your work.

Let me hear you:

When someone wastes hundreds of millions of taxpayer dollars it will show up on the front page of what?



Audience: "The Washington Post"

That's right, "The Amazon Washington Post"

[show Headlines]



And rightfully so, voting taxpayers get angry.

Congressional jobs are threatened



In response Congress demands reviews, action, holds committee meetings or hearings.



Agency leadership or even public



company CEOs must respond are called to testify – their job is on the line.



In response Congress puts more regulations on the agency. It requires that the agency **perform better planning, provide detailed oversight, collect granular reporting** so this doesn't happen again. And they ask that the agency **follow industry best practices** to avoid these issues in the future.

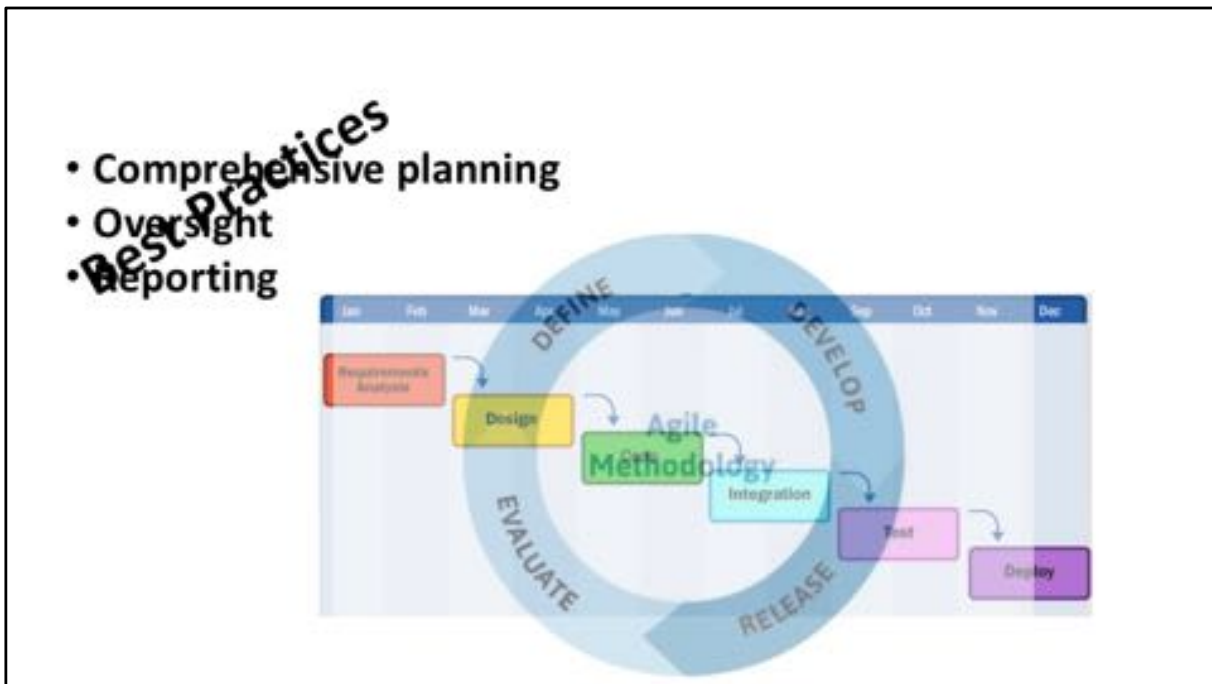
As. Well. They. Should. They are the ultimate stewards of ...



taxpayer dollars.

The agency director tells the contracting office to include **oversight, reporting** and **industry best practices** in contracts. They are **required** to put those both in there. They should. And they do. It is their moral responsibility... and their jobs are on the line. The director of that agency may be required to report back on the changes instituted.

And should a similar case of fraud, waste or abuse occur your agency will need to show the receipts. They'll need to prove that they had required comprehensive planning, maintained comprehensive documentation, etc. etc. etc.



What's the end result of all of this? Government contractors get contracts that require **comprehensive planning, oversight, and reporting** – Waterfall

AND which also ask for **industry best practices**

CLICK – Agile.

That there is both waterfall and agile in your contract is not a bug. It is planned feature creep.

Agile is a Drupal 8 module that you're being asked to run on the Waterfall Drupal 6 core.

There SHOULD be a request for planning and oversight and there should be a request for best practices in your contract. The challenge is that best practices tell us that the *old way* of planning (in particular) and some aspects of oversight are counterproductive.

The only issue here is that the planning and oversight approaches traditionally in

place in government contracting are lagging behind more efficient ways of working.



Humans are flawed.

We often forget that government contracts and requirements are written by a human being. The rules that manage how that contract is written was made by a human being. The people who responded to the RFP and wrote the “solution” are human. And those trying to execute on those contracts are human.

Often RFPs are written because the government recognizes that there is a problem. Your job is to identify the root cause and provide a real solution. And the fact of the matter is the real solution may be in direct conflict with the work requested as written.

People are imperfect.

Any human-developed process is imperfect. Government contracting is no exception. We are all just imperfect people.

So, step one in “doing agile for a waterfall client”...

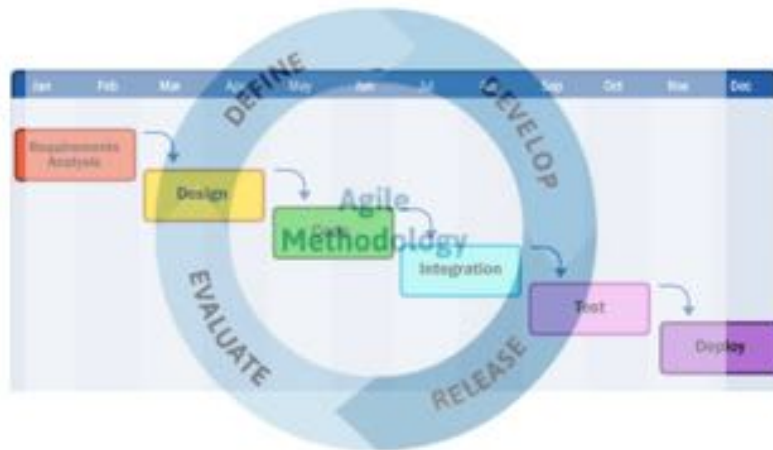


is *empathy*.

They are not perfect. You are not perfect.

But you must work together if you are to build something great.

Agreed? Good. So now that we've established that neither side is composed of infallible robots let's get some work done.



How do we reconcile Waterfall and Agile?

Let's go back to the Agile Manifesto.



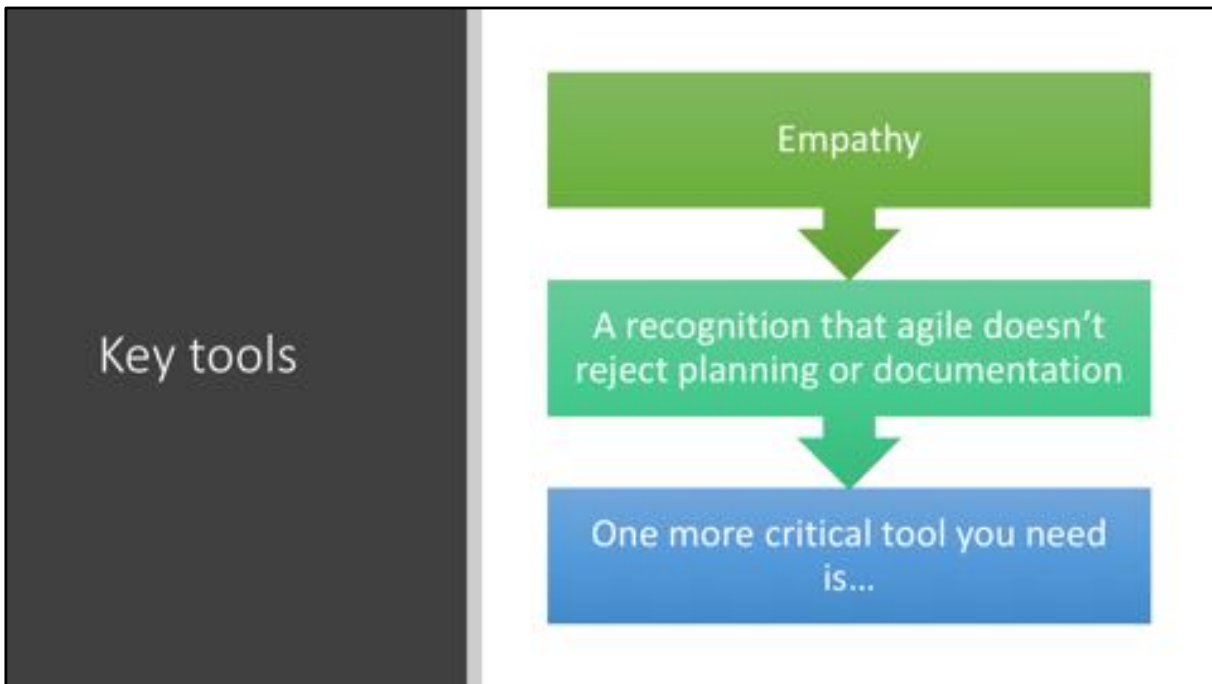
I've got some bad news.

The agile manifesto includes BOTH Agile and Waterfall.

processes and tools
comprehensive documentation
contract negotiation
following a plan

This is waterfall. It is part of the agile manifesto. Agile simply emphasizes the left OVER the right. When you have to trade off choose the left if you can.

So far we see that to work agile for a waterfall client you need...



Empathy

A recognition that agile emphasizes agile practices over waterfall practices. It doesn't suggest they should not exist

One more critical tool you need is...



TRUST.



When you build a trusting relationship you can collaborate, push and pull and get to a real solution. Without trust everyone will retreat back to the contract. Which was written by?

Audience: "Humans!"

Correct, Humans.

Who are?

Audience: "Flawed!"

With the one exception of?

Audience: yells various guesses.

Correct!



Beyoncé.

But for the rest of us...



You must develop a positive working relationship with your client. If you cannot achieve this you will likely have a terrible time fulfilling the requirements of your contract. That's not to say you can't fulfill the requirements of the contract. You CAN successfully get paid for a waterfall project and check off all requirements without trust. If you do so you may or may not provide actual value to the people actually using the technology you've created.

You CAN NOT however, successfully complete an agile project AND meet user needs without trust.


If you want to check boxes? Waterfall away.

If you want to create real value and delight your users you will need Agile which requires trust.

How do you build
trust?



So, how do you build trust?



Through consistent and
predictable behavior
and though transparent
behavior.



You demonstrate consistent behavior with practice and training.

Through repetition and showing value.

Basic exercise for building client trust:

1. You tell your client what you're planning to do
2. You set a time at which you will report back on the status of that plan
3. Then at the time you set to report back on the status of the plan you report back on the status of the plan
4. Repeat.

Here is my favorite exercise for building client trust. (This also works with friends, family and in life in general).

You say what you're planning to do.

You set a time at which you will report back on the status of that plan.

Then at the time you set to report back on the status of the plan you report back on the status of the plan.

Repeat.

Note that what you're doing here is "reporting on the status of the plan" and not committing to work and then reporting that the work you committed was completed. Naturally, you should also do the work in the meantime. But work will be unpredictable. Your reports however CAN be predictable.



Another important behavior is transparency. By which I mean to be honest, regularly, and as early as possible. Don't try to paper over every little flaw.

"You can fool all of the people, some of the time. You can fool some of the people all of the time; but you can't fool all of the people all of the time."



Your client is not an idiot. If you only report good news your client isn't fooled. What you are telling them is that you will do anything to put a good face on the contract. Which means if they complain they know you will go crazy to react to whatever unreasonable request they have. This will make you and your team miserable.

What you want is to **team up** with your super hero client



Let your client know as early as possible when there may be an issue, and what steps you are taking to mitigate that issue and then report back on that issue. This might be your risk register.

Chances are you will fix the issue before it comes to fruition. When you demonstrate that you are looking for possible issues and work to solve them your client will begin to **trust** your ability to manage unanticipated problems.

When the eventual big surprise does show up. And it will. Because despite Waterfall's best effort we are unable to plan for every contingency.

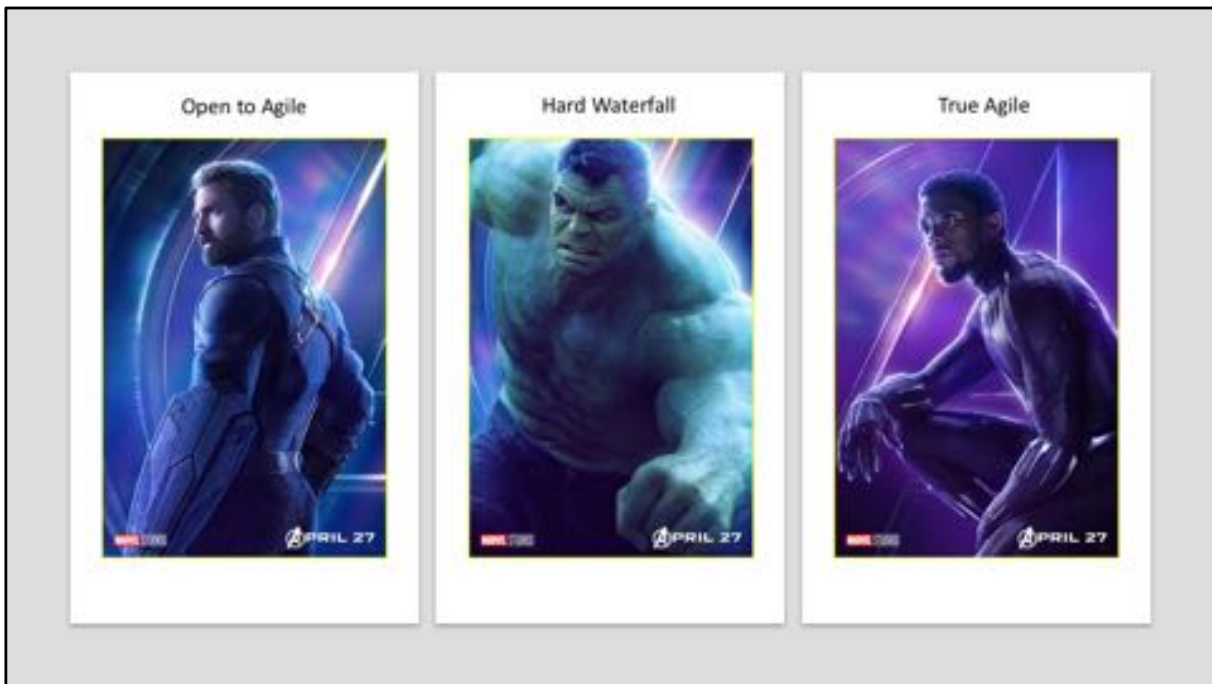
Your agency will have already seen your ability to problem solve and the issue at hand will be a moment for **collaboration** and **rapid problem solving** instead of a crisis.

Assumptions

I'm about to talk about the various examples. As per any good contract I'll state my assumptions.

My assumption here are that this is a website or software project for the Federal government. These examples also assume that this contract is already won.

A good talk to give would be on how to write your proposal response in a way that sets you up for agile. My initial thoughts on that is to write to your process not to your solution. When you execute agile well your process IS your path to finding and executing the solution. But I'm still generating data on this topic so we will not dig into that today.



Let's get into the examples

I propose broadly three different Agile client types:

The Open to Agile client

The Hard Waterfall client

And the True Agile client

[reveal captain America]

This is the Open to Agile client

This client has historically been waterfall but are interested in ideas that work and want to get the job done.

Some aspects of their process originate in the 1940s but they've worked to unfreeze themselves and are growing and evolving.

In my personal and anecdotal experience this is what I have seen most often.

If your client has asked for agile they may very well be this type.

Next is the Hard Waterfall client

[reveal Hulk]

I've encountered this client as well.

They are strong and get jobs done even if the result is not as tidy as you might like.

You most certainly don't want to make them angry.

I expect this is the default in government unless they are looking to bring in agile.

Finally the Hands on Agile client

[reveal Black Panther]

This is more rare. I have not personally experienced this example so I asked my friend Greg Gershman of Ad hoc for information on this example.

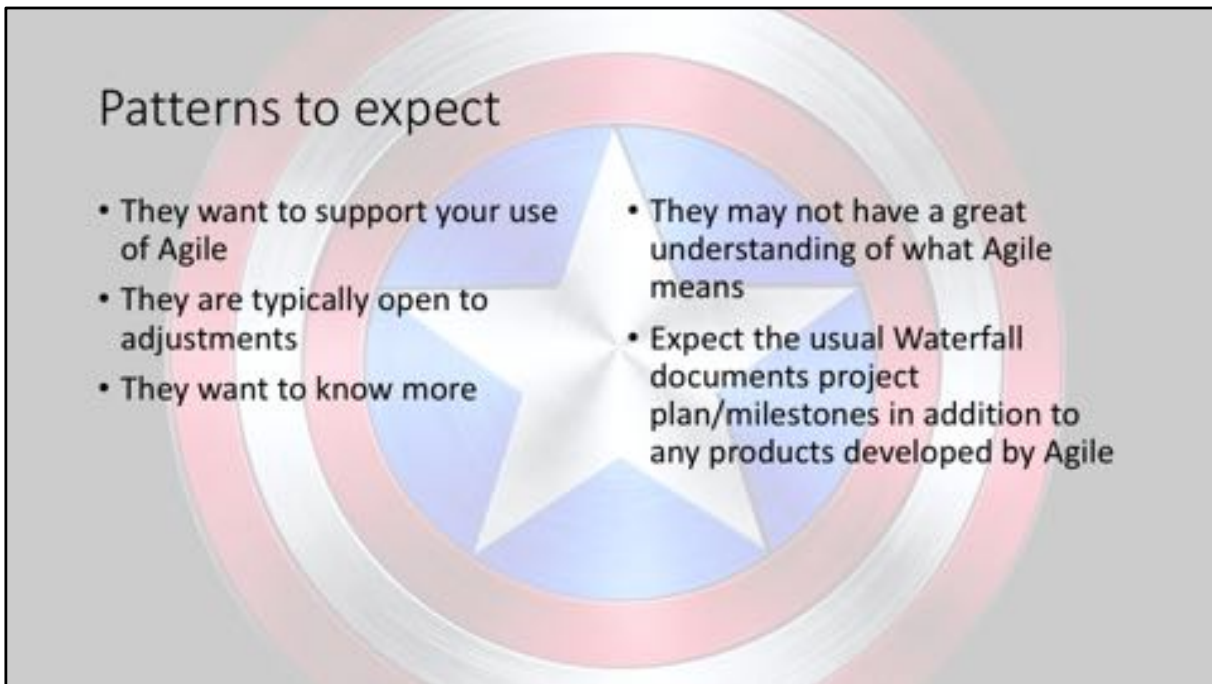
This client or a part of their agency may be an island unto their own within the larger world of the federal government.

They have been innovating and creating technology that no one else has been able to do.

They are lean and agile by nature.



Let's start with the government agency historically waterfall, interested in Agile.



At a high level on this kind of project you will be **managing expectations** around project management and **teaching your client about agile**.

They want to support your use of agile

They are typically open to adjustments

They want to know more

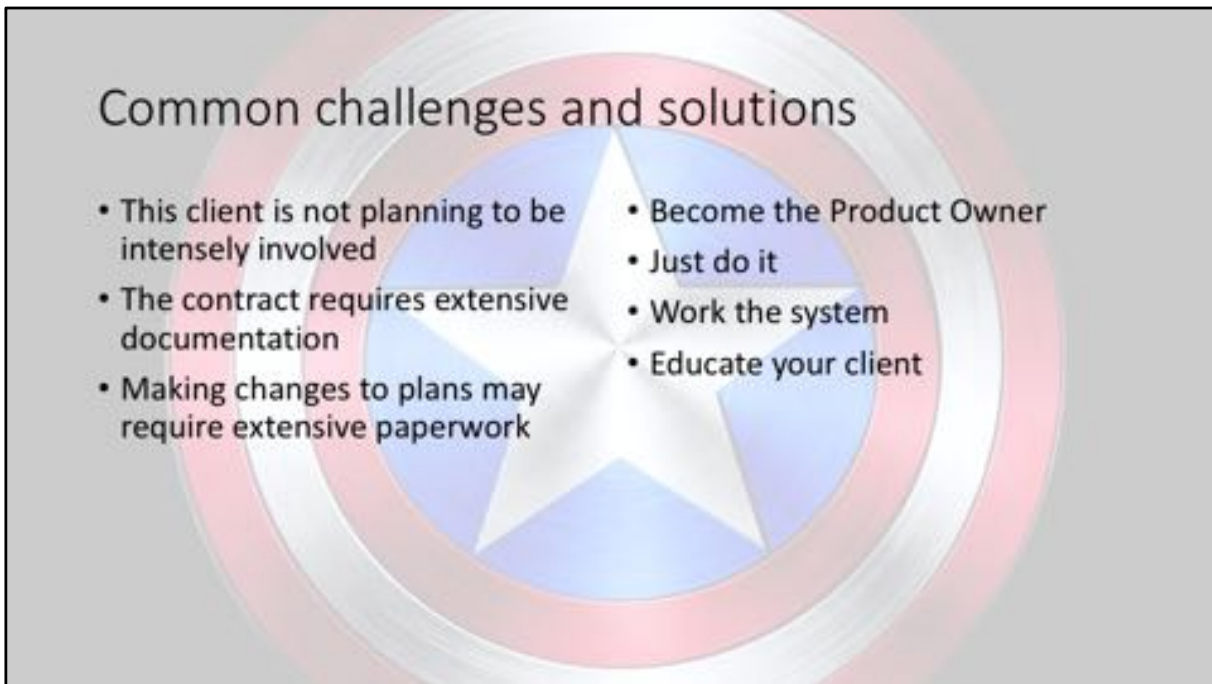
The Bad news is

They may not have a great understanding of what agile means or what working agile will do to their usual process.

They may be holding meetings with agile titles like stand ups and sprints but your approach will require them to adjust to a new way of thinking about these meetings.

For example: No more 45 minute stand ups.

Expect the usual Waterfall documents project plan/milestones in addition to any products developed by Agile



At a tactical level these patterns will express themselves in the following ways

This client is not planning to be intensely involved

They may not know what a product owner does and the level of engagement needed for success.

The contract requires extensive documentation

Making changes to plans may require extensive paperwork

If you adjust the project as you go you may need to file many contract adjustments.

Here are some ways to address these challenges

When your client is not prepared to be intensely involved.

Become the Product Owner. As the PM take on the role of PO.

Hire a scrum master. The PO and ScrumMaster are two positions with conflicting responsibilities. Attempting to do both at the same time will create poor results.

Bring the client into the process as much as you can. Give them a training on your agile process.

The contract requires extensive documentation?

Just do it. As the PM this is your job.

Agile emphasizes working software over comprehensive documentation.

Scrum in particular doesn't even have a Project Manager role. Now you have something to do.

Also talk with your client about which scrum artifacts can count toward documentation. For many clients Jira tickets can count toward a lot of your reporting. Some clients might be open to inline commented out documentation as a contributing part of the comprehensive documentation.

Change to plans may require extensive paperwork

PMs, work the system.

It is not fast. But it will create the paper trail your client may need to sign off on the changes to the contract that your user research and demo prove you need to make.

Submit changes to the project plan as appropriate and maintain communication with your client. They may shift their mindset to "working software over comprehensive documentation". When there is trust working with your client you may be able to make a change to the contract so that it reflects your process.

How do you bring this client in to the agile process?

Lots of communication. Talk to your client about their understanding of agile. Learn what their expectations are and what level of involvement they are interested in. Walk your client through what to expect. Come up with an agreement on what their responsibilities will be. As you work together introduce new aspects of agile to your client. Provide training for them if you are up for it.



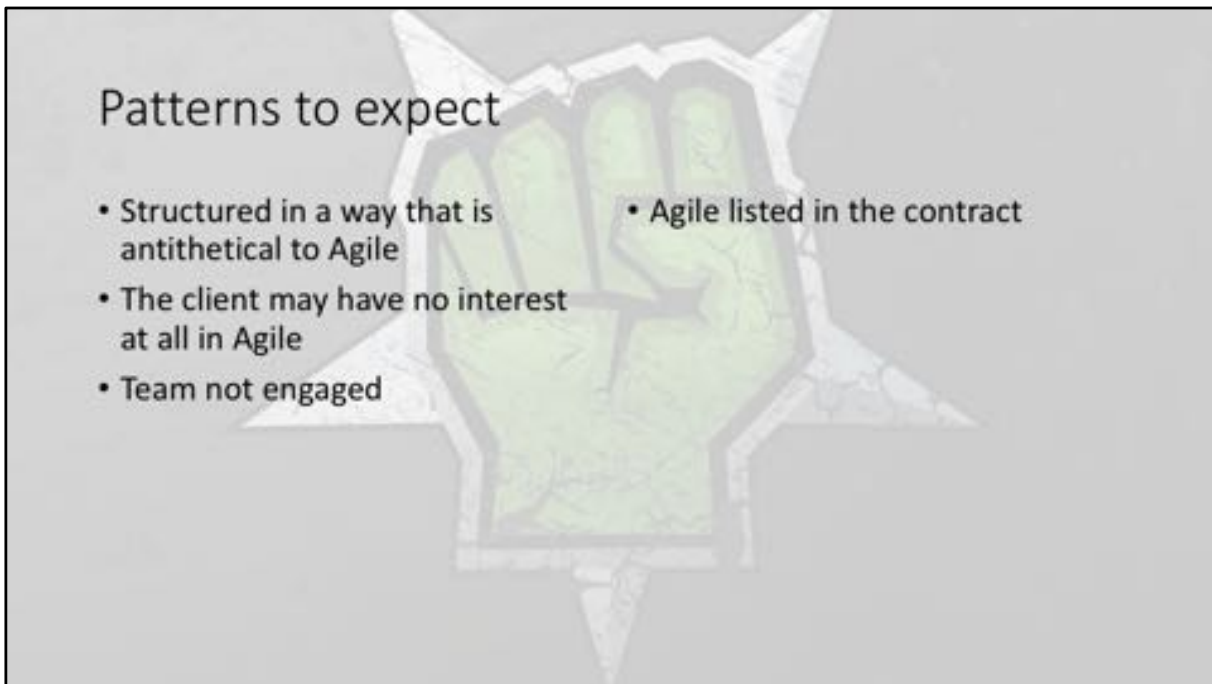
With the Open to Agile client

You are educating and adjusting expectations as you work together.

At the end of this project this client should know more about agile and will hopefully be looking to be more agile with their next project



The Hard Waterfall client



Patterns to expect - At a high level

The project may be structured in a way that is antithetical to agile. The process may be strictly defined as waterfall.

The client may have no interest at all in Agile so they likely will not
Participate in Agile events
They may not be available to set priority or see it as a responsibility

Portions of your team may not have work to do at the beginning of the project. And may have other periods where they are not working as the work progresses.

The Good

Agile is likely listed in the contract
Which will give you the justification you need to introduce the practice into your approach.

Common challenges and solutions

- Project is hard coded for Waterfall
- Client is not interested
- Not all of your team is engaged at all times
- Fight for modifications
- Create a bubble around your team
- Create ownership for your team

Let's talk about these challenges

Project is hard coded for waterfall

Client is not interested

Not all of your team is engaged at all times

Project is hard coded for waterfall

You may need to fight for modifications if the work as proposed is non-sensical. For example the contractor who was told to hire 40 engineers and 1 ScrumMaster.

When Client is not interested

You may need to create a bubble around your team and your process. That said the PM will need to run the project as waterfall as far as all client interactions go. If you have hard milestones built into the project then you may be delivering an MVP version of the milestone. Agile will be less of a collaborative process between you and your client and more the method by which the artifacts for the waterfall process are created. From an agile standpoint this is not really agile. This also addresses...

Not all of your team is engaged at all times

If you are working inside the small agile shaped bubble you've created for your team the bubble may allow your team to feel some level of ownership and give them the ability to be creative within unhelpful restrictions.



With the hard waterfall client

You are working around the system to achieve results while still meeting the letter of the contract.

At the end of this project this client should be exposed to agile and you should be able demonstrate where a more agile process created efficiencies in the project.



The True Agile client

Patterns to expect

- They are committed to the approach
- Understands the responsibilities of a Product owner
- They know what the product is about
- They are going to be an advocate for the product within the organization
- They Will make themselves available to the team
- Usually pretty new to it
- Even the most agile federal groups are relatively new
- Good chance the broader agency is not Agile

What patterns to expect

The Good

- They are committed to the approach
- Understands the responsibilities of a Product owner
 - And what it means to own a product
- They know what the product is about
 - They may already know who the users are
 - If they don't they will work with you to identify them and get you to them
- They are going to be an advocate for the product within the organization
 - They will be an ally when you have issues.
- They Will make themselves available to the team
 - Sometimes there are nominal product owners

Bad

- Usually pretty new to it
 - Even the most agile federal groups are relatively new.
- Good chance the broader agency is not agile

Common challenges and solutions

- While they have a good understanding of the problem they still may not have a solution
- There may be an agency wide software Lifecycle process
- When you are ready to launch you have not done any of the documentation or security reviews
- Client may not be able to protect you from everything else going on within the organization
- This is fine
- Working the software Lifecycle process into the project
- Work it as best you can with your company

How does this manifest into common challenges

While they have a good understanding of the problem they still may not know What the product should do – Which is fine. This is something you will discover through your process. This is in contrast to the other clients who may have something specific in mind.

There may be an agency wide software Lifecycle process

To get the system up and running you will still need to jump through hoops (waterfall, gate review oriented)

Client may not be able to protect you from everything else going on with in the organization

When you are ready to launch you have not done any of the documentation or security reviews

How to address these challenges

Working the software Lifecycle process

Greg says: There is a real risk is that you will get the work to a place where you are ready to launch but have not done any of the documentation or security reviews

Build it into the project

PMs! Sharpen your documentation pencils. Make sure you keep an eye on this work and that it gets done even if it is not made part of your sprints.

While they are going to be an advocate for the product within the organization there may still be some issues they can not fix for you.

They may be able to help with budget issues

They will help balance the priority issues with whatever else may be going on within the larger agency. But there will be times where you will still need to work with your own company and exert whatever influence you have to solve political problems.



At the end of this project you should know more about agile and have a more sophisticated implementation. Not because the client showed you but because you worked hard and evolved and learned together with them.



- Working as an Agile team is hard can produce incredible results.
- The reason your contract has both Agile and Waterfall requirements is because of good intentions which you will need to navigate
- Empathize with your colleagues on both sides of the contract
- Build trust with your client or contractor
- Create the space to do great work under a variety of circumstances

In conclusion...

Working as an Agile team is hard work but it can produce incredible results.

The reason your contract has both Agile and Waterfall requirements is because of good intentions which you will need to navigate

Empathize with your colleagues on both sides of the contract

Build trust with your client or contractor

Create the space to do great work under a variety of circumstances

Thank you for your time.