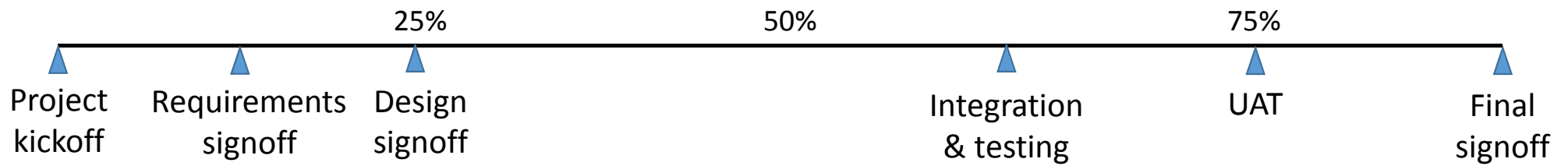
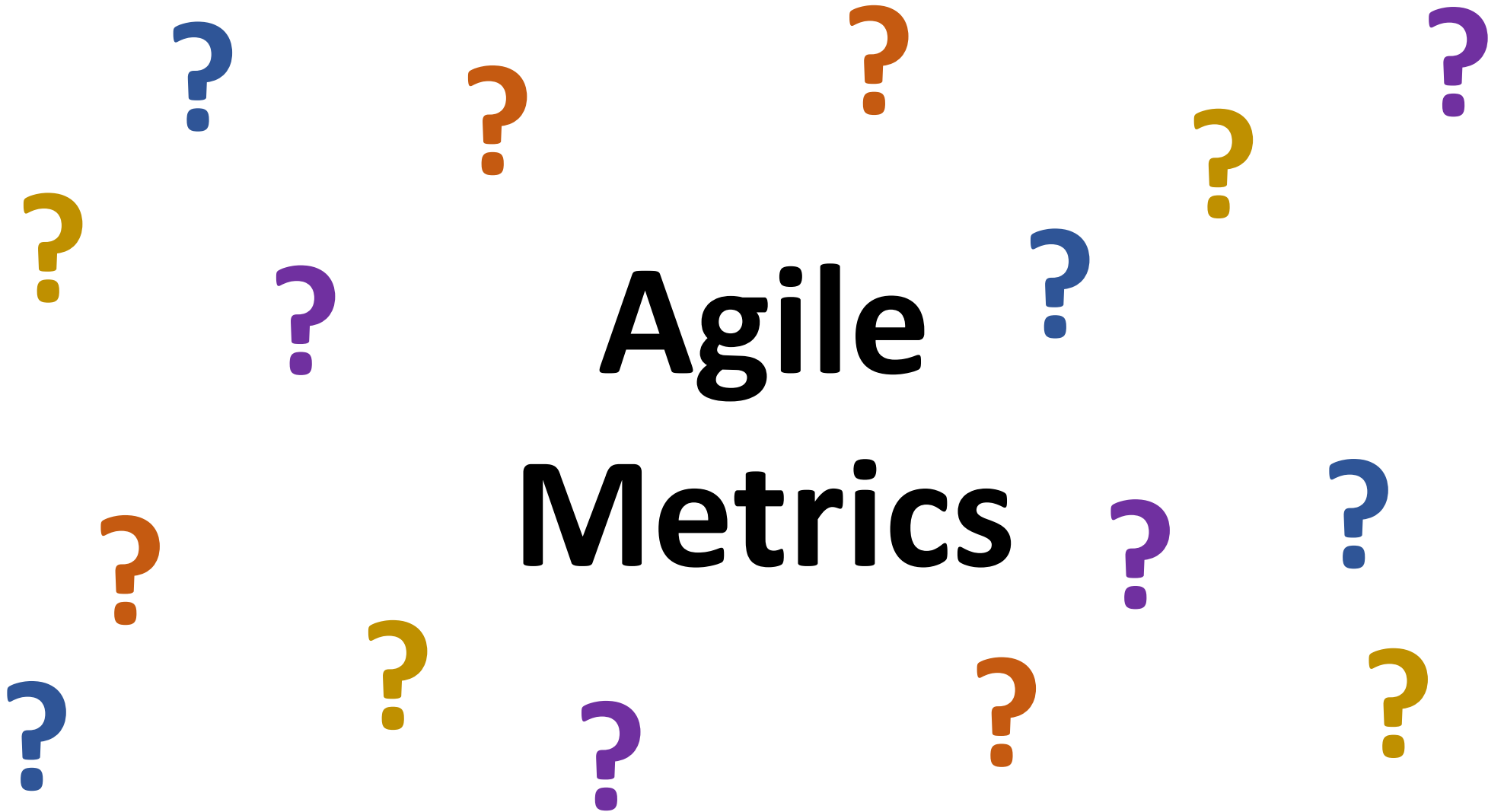


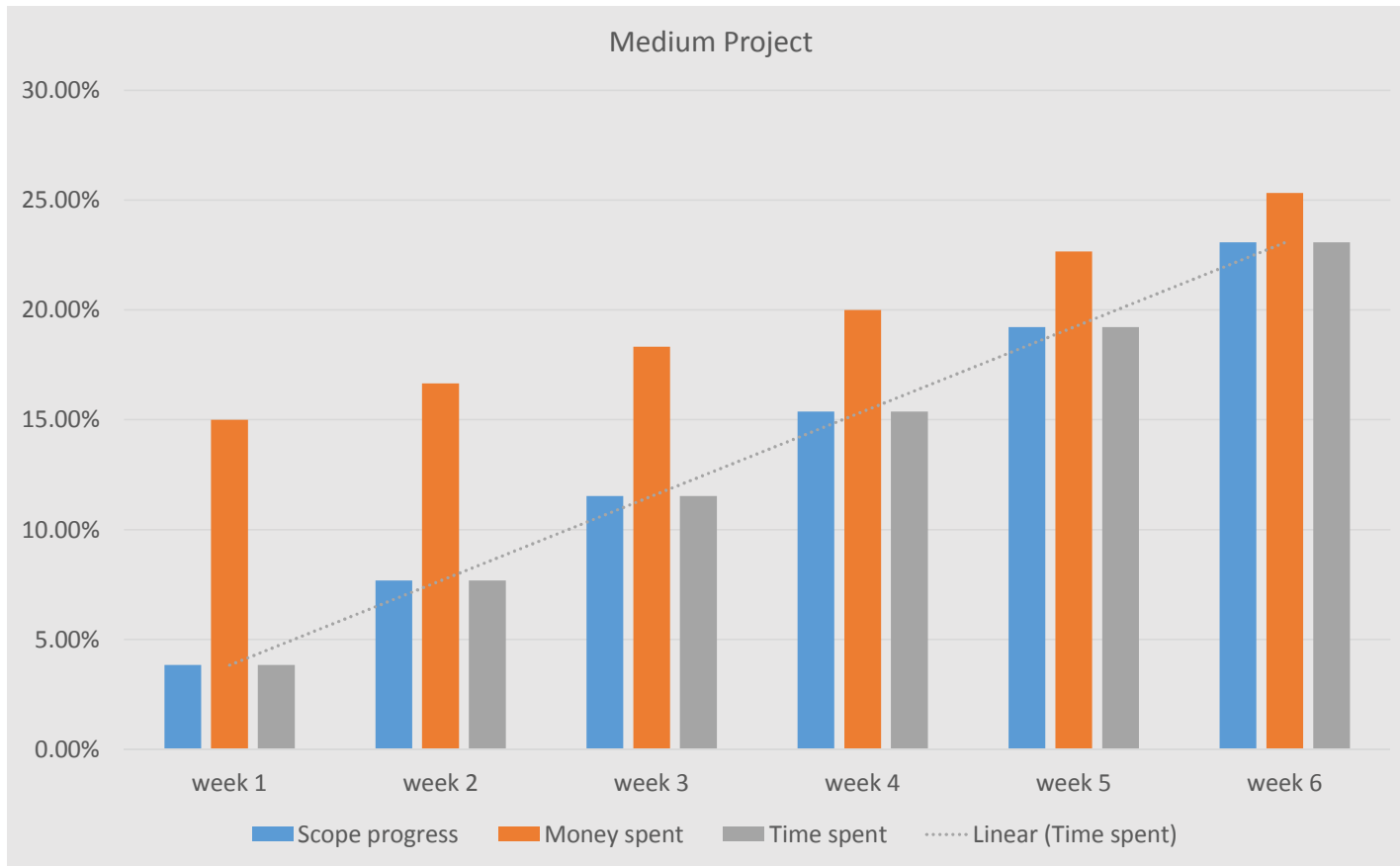
One Portfolio Progress Report across All Project Types

It Can be Done!



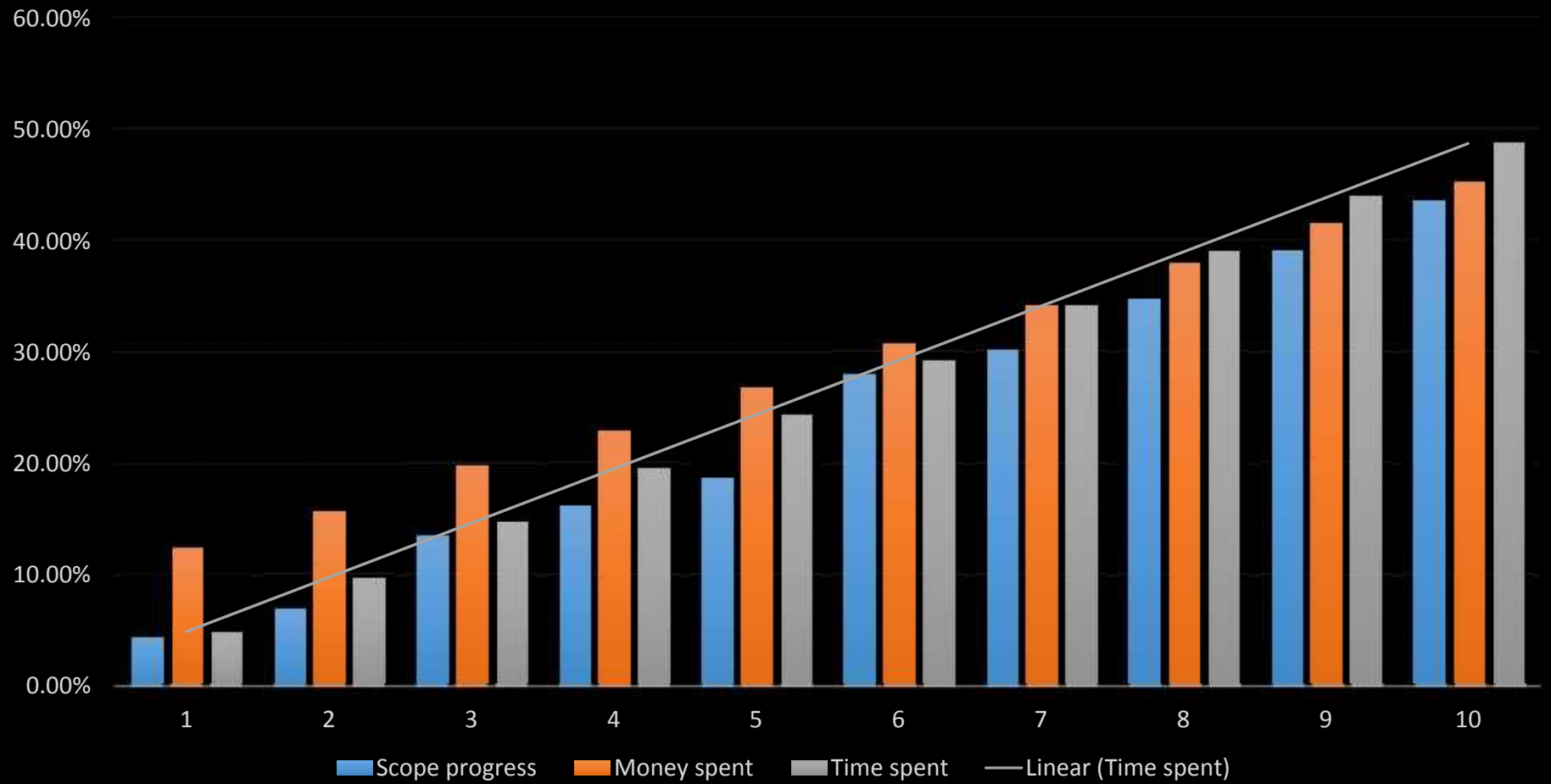
Agile Metrics



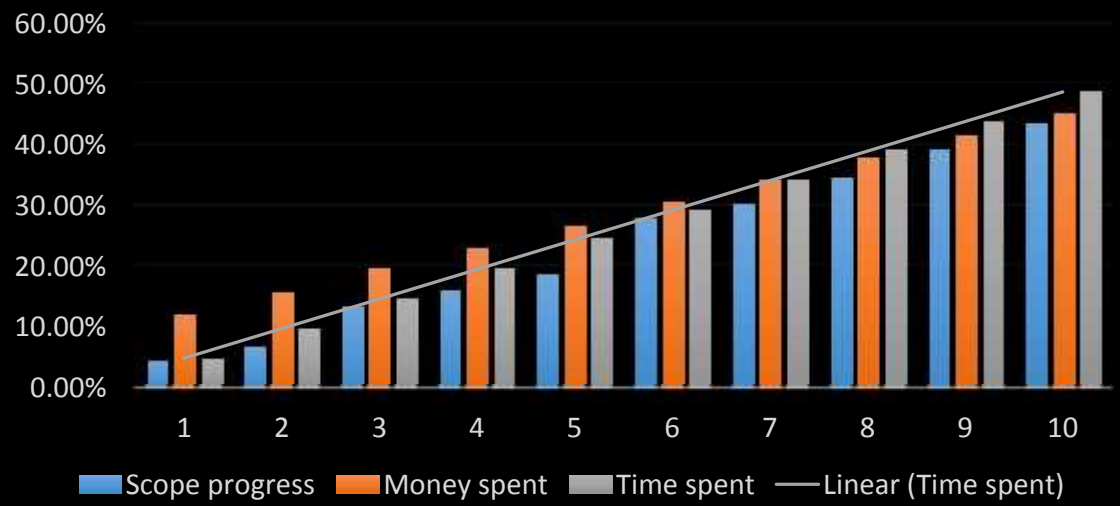


Includes purchase of server and software at the start of the project

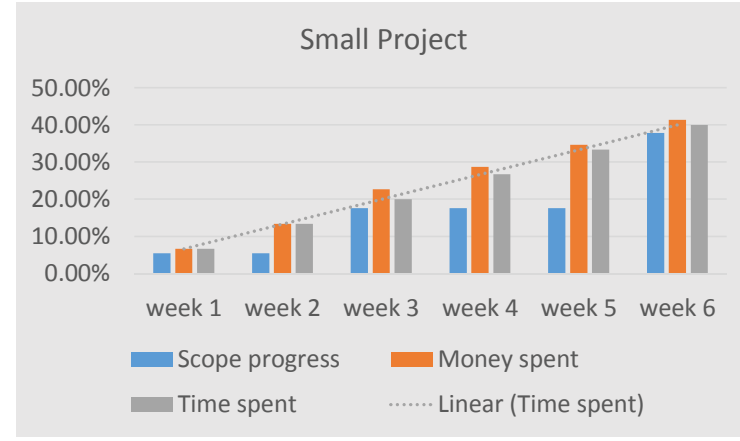
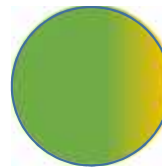
Portfolio actual thru week 6, forecast weeks 7-10



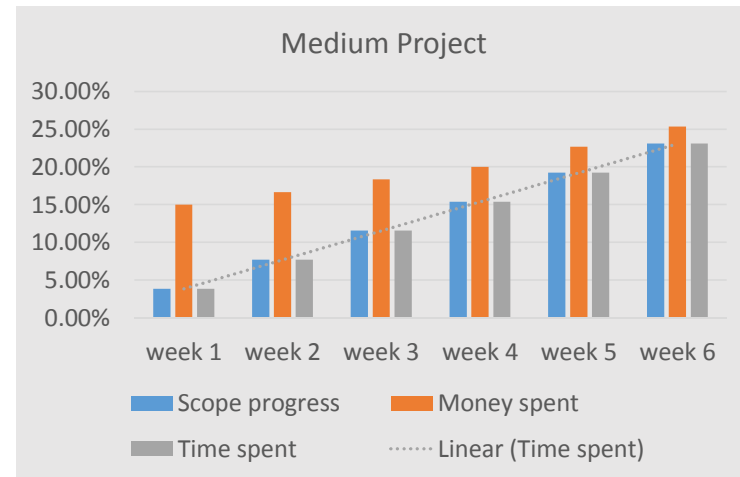
Portfolio Forecast weeks 7-10



Portfolio Status



Agile SDLC – scope zero or 100% done



Waterfall SDLC – scope % complete estimated
Includes purchase of server and software at the start of the project

Known Serious Issues and Risks

- Forecast shows potential of total portfolio scope not being completed on time, though both projects are progressing well. This is something to watch.

Projects Planned this year: 12

Inflight 2	Completed 3	Future 7
<p>≤\$1 million</p> <p>1</p>	<p>ON TIME 3</p> <p>ON BUDGET 3</p>	<p>≤\$1 million</p> <p>5</p>
<p>> \$1 million</p> <p>1</p>		<p>> \$1 million</p> <p>2</p>



New work for Product Owner

Define project goals as work items
Estimate work item size relatively

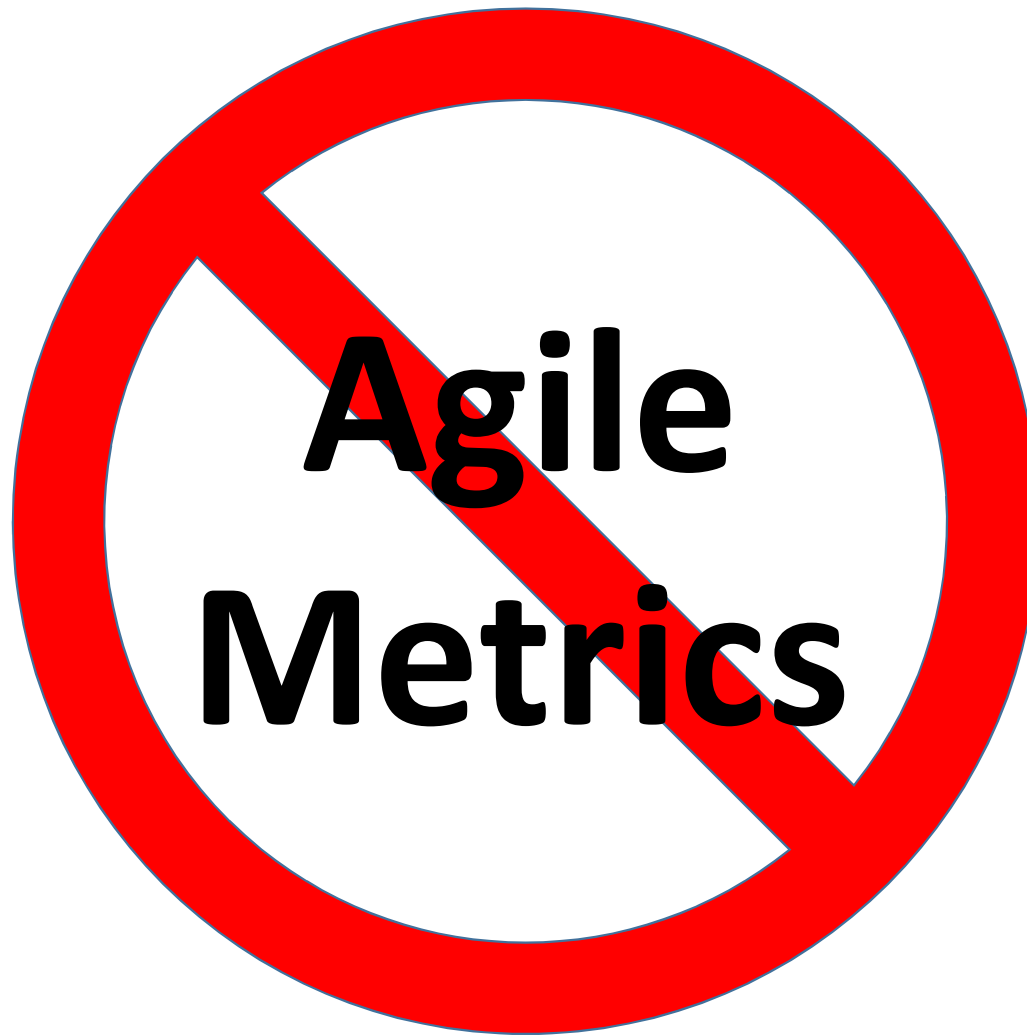
No change for Product Owner

Write user stories for the work items



No Change for Agile Team

Estimate user story size relatively
Write tasks for user stories
Estimate task hours



“The only Agile metric is continuously delivering a valuable solution.”
many Agile practitioners

“All I care about is having a quality roof installed on my home. As long as I see incremental progress of a quality roof being installed, how long it takes to finish and how much it costs do not matter. “



Fiduciary Responsibility

- Executives are legally responsible for how the company money is spent.
- Why do we need a progress report:
 - To show how much money we have spent and how much we anticipate spending on some particular work
 - To make decisions about whether it is worth spending additional money on a particular project or piece of work
 - To determine when we can capitalize a project and thus add to the value of the corporation

Without a progress report...



Portfolio

- An overall budget and a bunch of things to spend that money on
- For example:
 - Buy and install COTS software for accounting and train them on it
 - Review the project planning cycle and make recommendations to make it more lean
 - Investigate the pros and cons of a virtual workforce and make recommendations
 - Upgrade our office productivity software
 - Develop a new product to do XX and release version 1
 - Improve a specific KPI
- Items are added and subtracted throughout a fiscal year

Planned numbers for Portfolio Items

- Each portfolio item has the following attributes which represent the plan:
 - Description
 - Budget
 - Estimated Duration
 - Relative Size (compared to other items in the same portfolio)
- Adding the sizes, budgets, and durations gives totals for the portfolio
- We can easily see each portfolio item's % contribution to the portfolio for each measure
 - These percentages do not have to match!

IT Portfolio 2017

Portfolio Item	Size	Budget	Duration (weeks)	% Size	% Budget	% Duration
Buy and install COTS software for accounting and train them on it	10	1,000,000	12	5.25	5.25	9.38
Convert HR to Cloud Solution	120	12,000,000	50	63.16	63.16	39.00
Upgrade our office productivity software company wide	50	5,000,000	16	26.30	26.30	12.50
Enhance our mobile app – 4 releases this year	10	1,000,000	50	5.25	5.25	39.00
Portfolio Totals	190	19,000,000	128			

Decompose a Portfolio Item into work

- At some point a Portfolio Item will be scheduled to begin
- Using the description as a basis, the Portfolio Item is described by a set of Work Items
 - something relatively small, nearly independent, estimable, verifiable
- Work Items are sized relative to each other
- Work Items also have a duration and may have an individual budget
- Each portfolio item can define units of work and estimate them any way that makes sense
 - Must be consistent within the portfolio item

Convert HR to Cloud Solution 2017

Projects	Size	Budget	Duration (weeks)	% Size	% Budget	% Duration
Basic HR	5	750,000	12	6.67	6.25	7.59
Basic Benefits	10	1,500,000	24	13.34	12.50	15.20
Health Benefits	20	3,000,000	50	26.67	25.00	31.65
Compensation	5	750,000	12	6.67	6.25	7.59
Absence Management	5	750,000	12	6.67	6.25	7.59
Time and Labor	5	750,000	12	6.67	6.25	7.59
Payroll	5	750,000	12	6.67	6.25	7.59
Decommission old systems	20	3,750,000	24	26.67	25.00	15.20
Portfolio Item (Initiative) Totals	75	12,000,000	158			

Basic HR 2017

Scope	Size	Budget	Duration (weeks)	% Size	% Budget	% Duration
Configure & activate Basic HR	30	325000	4	42.86	43.34	16.67
Cloud Legacy Interfaces	20	200000	4	28.57	26.67	16.67
Deployment Support	5	50000	8	7.14	6.67	30.34
Mini-release	5	50000	4	7.14	6.67	16.67
Production Release	10	125000	4	14.29	16.67	16.67
Project Totals	70	750000	24			

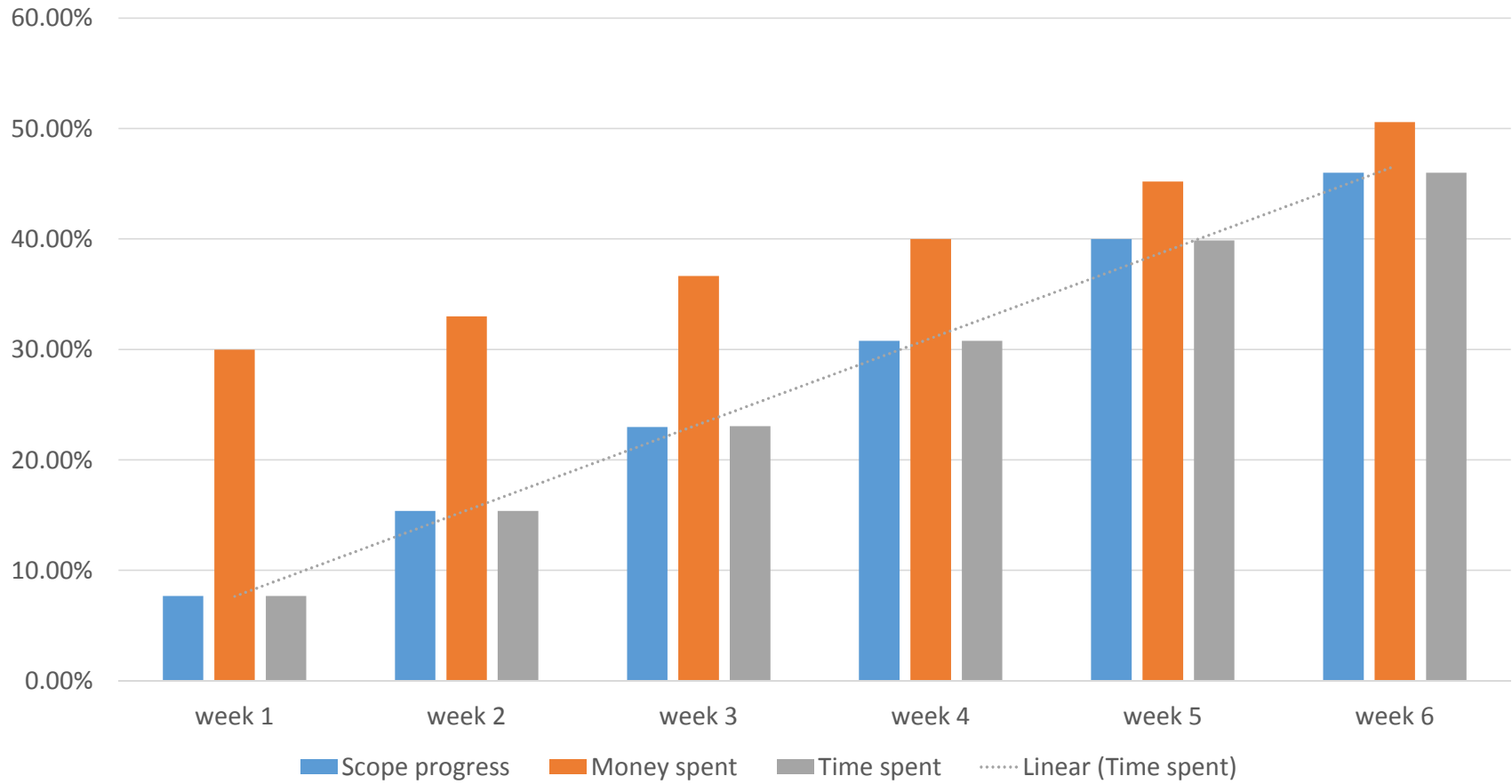
Basic Benefits 2017

Projects	Size	Budget	Duration (weeks)	% Size	% Budget	% Duration
Inception	5	20,000	1	5	1.34	4.17
Requirements	10	50,000	2	10	3.34	8.34
Design	8	30,000	2	8	2.00	8.34
Coding and Configuration	35	900,000	11	35	60.00	45.83
Integration Test	15	100,000	3	15	6.67	12.50
UAT	12	100,000	2	12	6.67	8.34
Rollout	15	300,000	3	15	20.00	12.50
Project Totals	100	1,500,000	24			

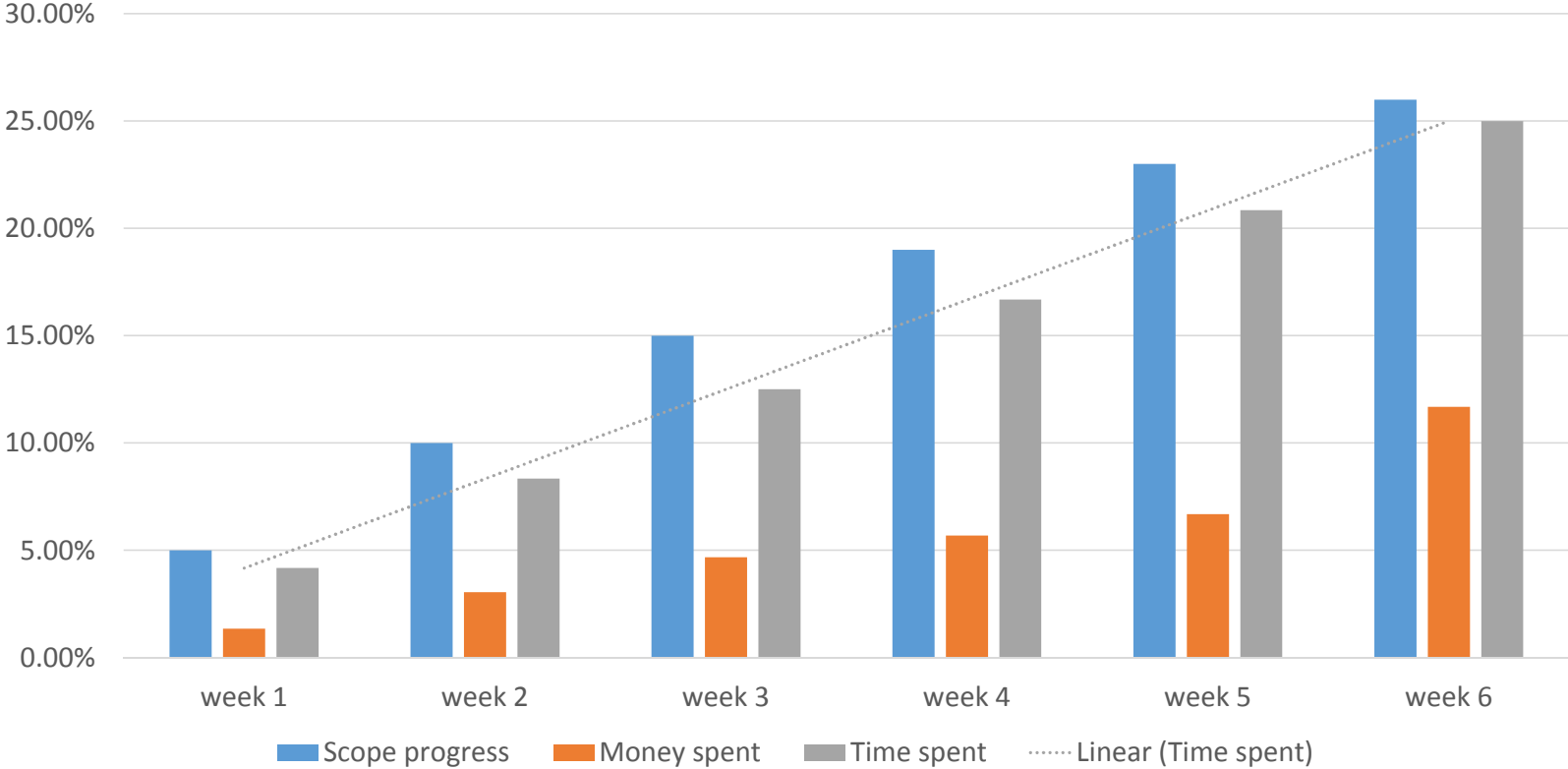
Project Progress Report

- %scope = scope completed / total scope
- %budget = money spent / total budget
- %time = duration to date / total duration

Basic HR



Basic Benefits



Portfolio Progress Report

- Progress is NOT reported on units of work, but % of work and resources
 - %units of work complete, %time consumed, %budget consumed
- By reporting on percentages, we can have one report that shows the status of the overall portfolio ***no matter how the individual portfolio items define and estimate their units of work***
- To roll up the work, multiply the project %s by their % contribution to their parent

The Math for the Portfolio

- Progress of Scope
 - For each project calculate
 - $\% \text{portfolio scope} * \text{percent project scope complete}$
 - Sum the results
- Budget Spent
 - For each project calculate
 - $\% \text{portfolio budget} * \text{percent project budget spent}$
 - Sum the results
- Time Elapsed
 - For each project calculate
 - $\% \text{portfolio weeks} * \text{percent project weeks elapsed}$
 - Sum the results

Week 6 calculations

Basic HR	scope=46% * 6.67%	3.00%
	budget = 50.6% * 6.25%	3.16%
	duration = 46% * 7.59%	3.49%

Basic Benefits	scope=26% * 13.34%	3.47%
	budget = 11.68% * 12.5%	1.46%
	duration = 25% * 15.2%	3.80%

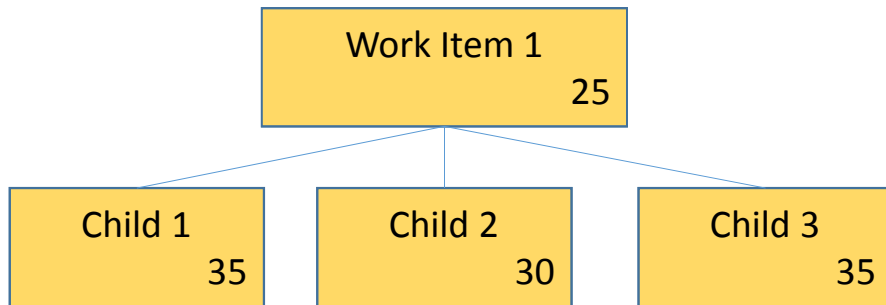
IT Portfolio Progress for just this program

scope = 6.47% * 63.16%	4.08%
budget = 4.62% * 63.16%	2.92%
duration = 7.29% * 39%	2.84%

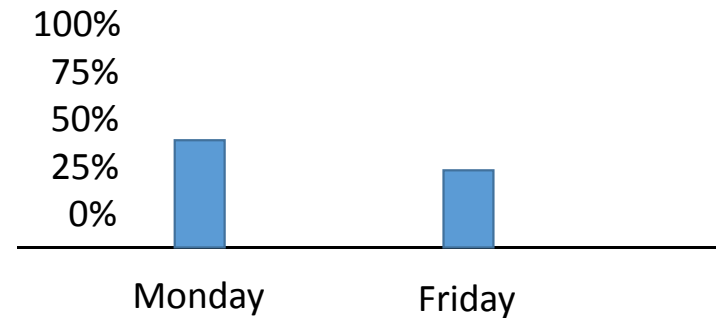
Program Progress	scope = 3% + 3.47%	6.47%
	budget = 3.16% + 1.46%	4.62%
	duration = 3.49% + 3.8%	7.29%

Tools to Support This Approach

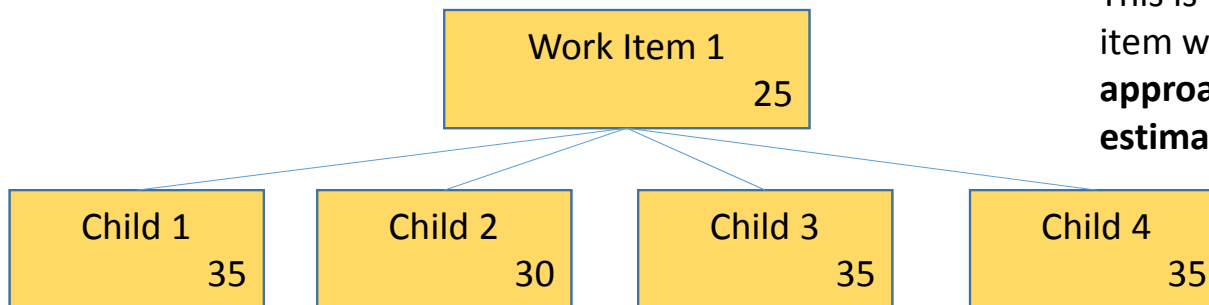
- Doing this manually is painful
- Set up some form of automation to do the work for you
 - Spreadsheet
 - Software



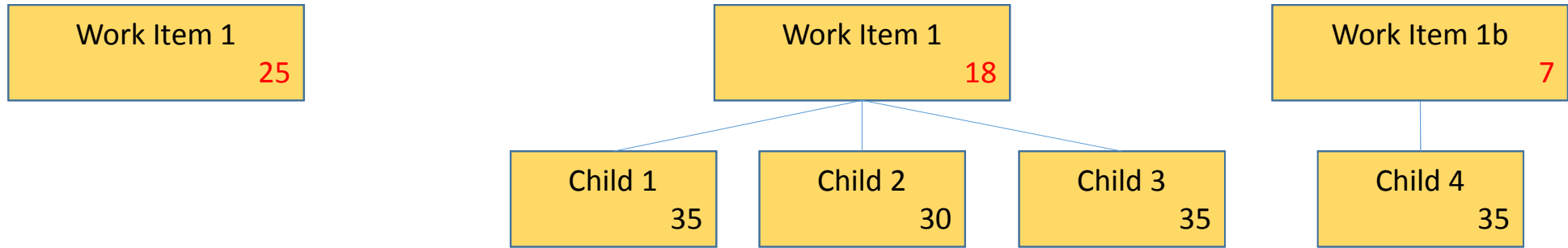
When Child 1 finishes, Work Item 1 is 35% complete.



On Friday we discover the need for a child 4.
Now Work Item 1 is 25% complete.



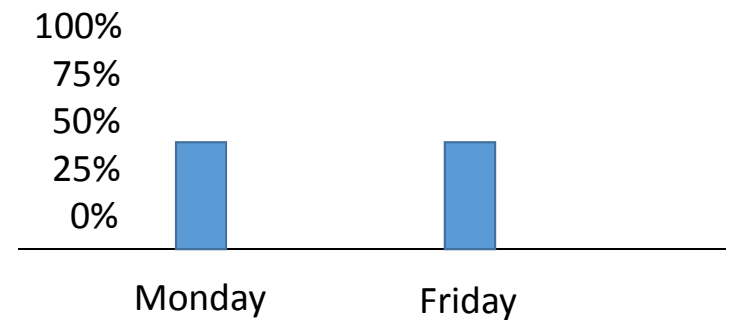
This is OK, because we have genuinely found the work item was bigger than expected. **This is the right approach when the work is larger than originally estimated.**

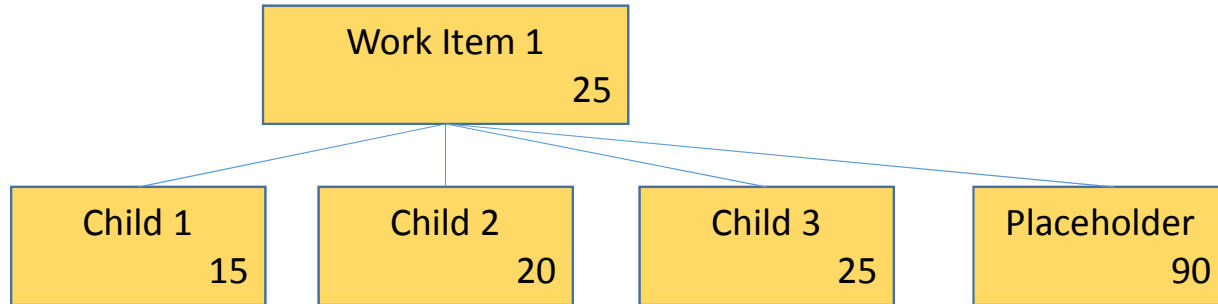
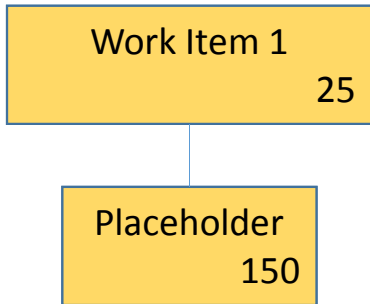


We can make a new work item and split the size of the original to avoid a change of the overall work from the parent perspective.

This is the right approach when the size of the work has not actually changed and you don't want to appear to be going backward.

Work Item 1 is still 35% complete.

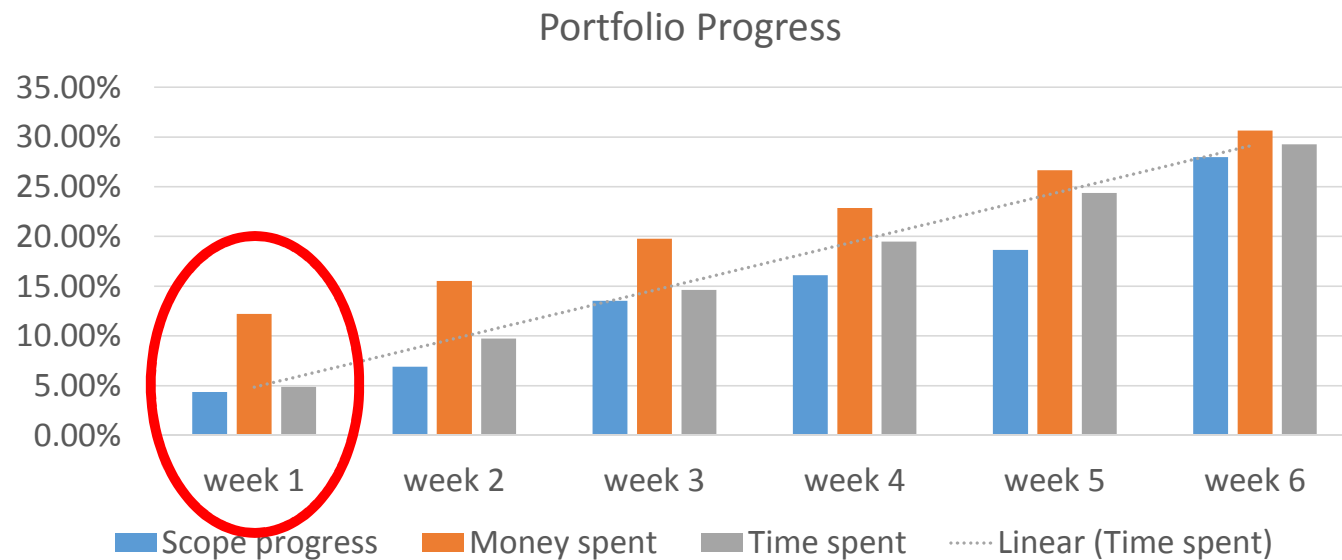




Upfront you could make a placeholder child sized for all the work. Then as you make children, subtract their sizes from the placeholder.

This could be a useful approach if what you are doing is pretty well understood so you can estimate the placeholder reasonably well, and yet allows the requirements to be developed over time.

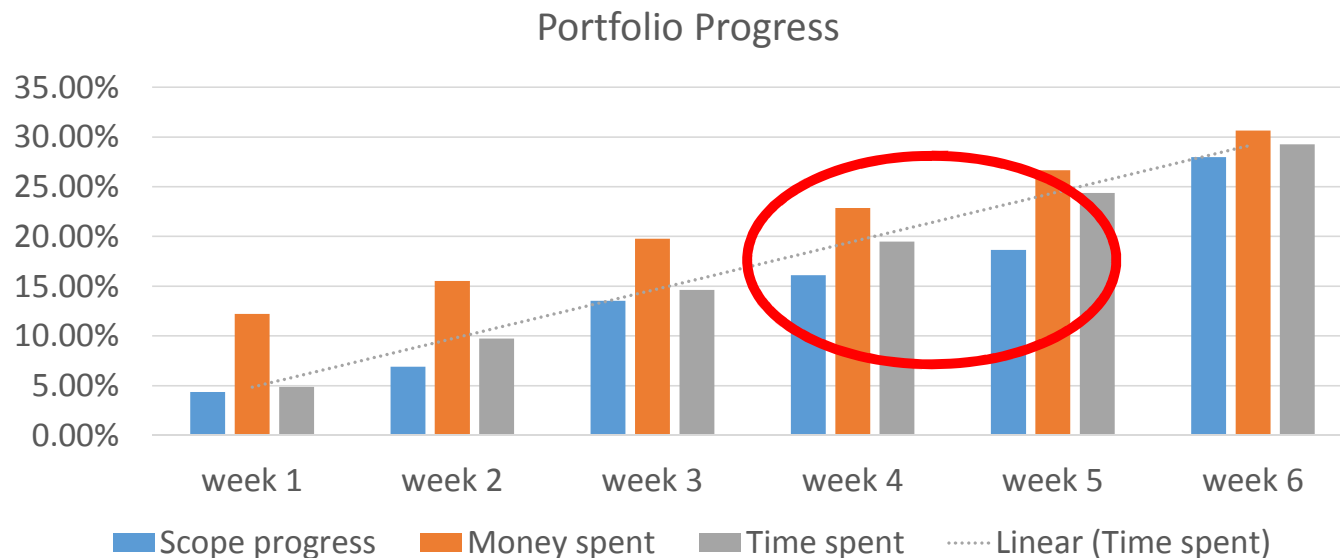
Capital Purchase? Team in Trouble?



Money is being spent faster than work is being completed.

- **Could be a capital purchase**
- **Could be a team in trouble**

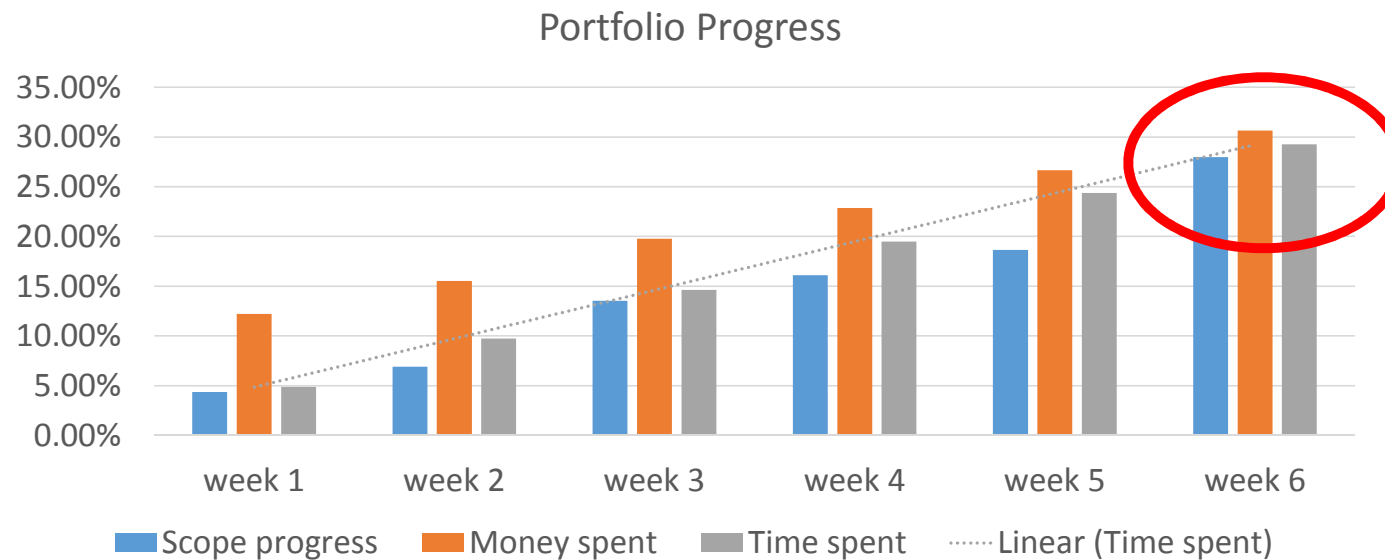
One bit of work more difficult? Team in Trouble?



The progress of work is below the trend line for a couple of reporting periods

- **Could be a transient problem, such as one bit of work was more difficult than expected**
- **Could be a team getting behind**

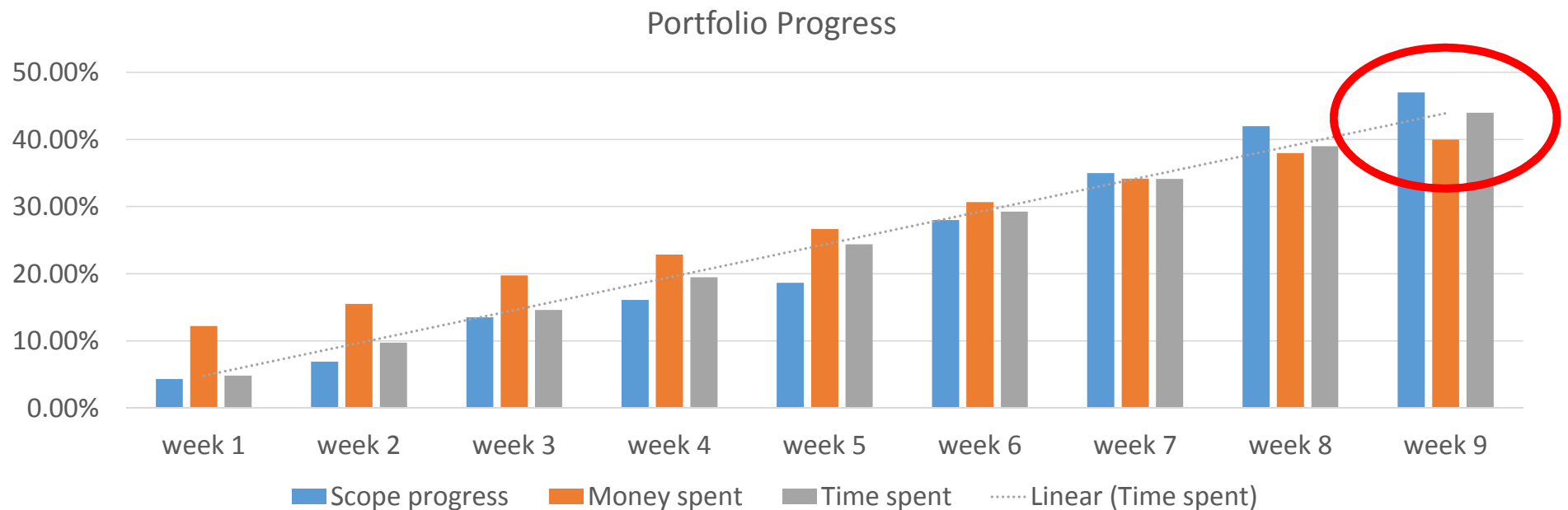
We Caught up, somehow



This looks good at the portfolio level

- **Money spent, scope delivered, and time elapsed are all about the same**
- **There could be hidden problems, so you always want to see the individual project reports as well**

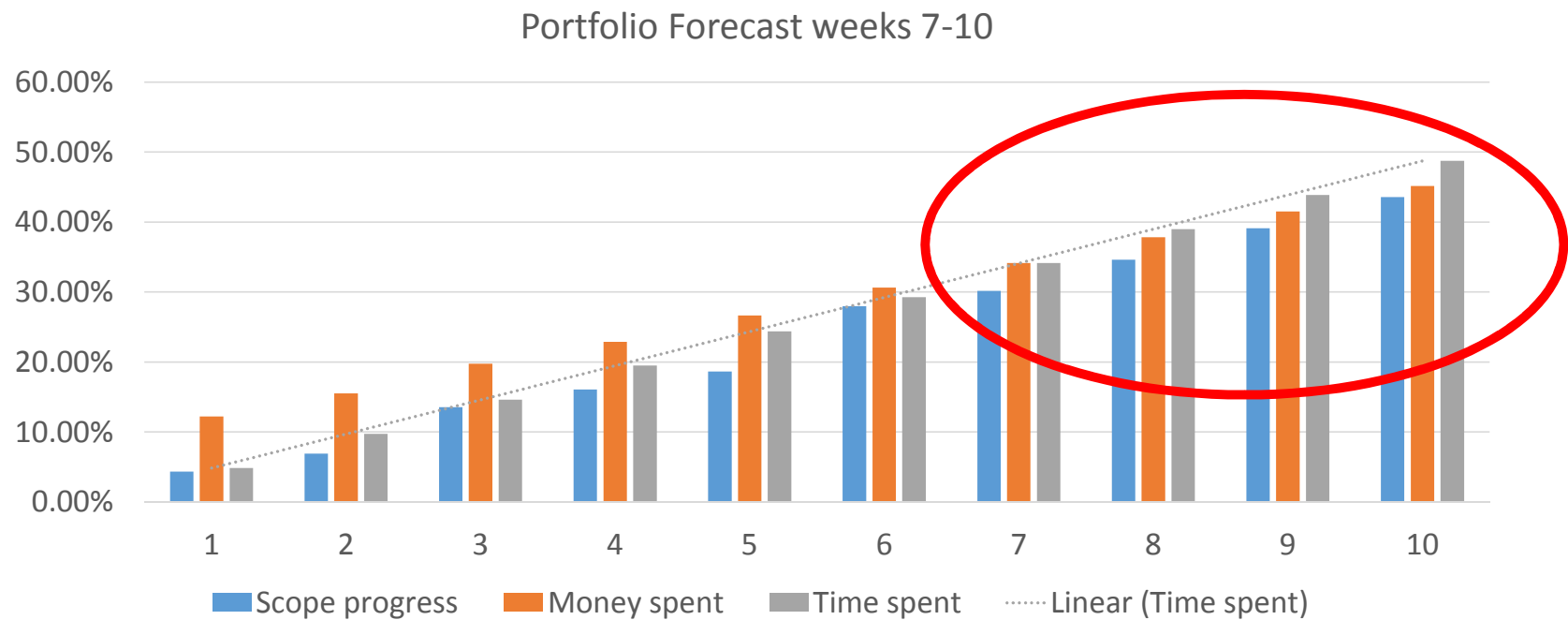
Work is easier than expected? Unreported overtime?



We are delivering work faster than we are spending money

- **The work was easier than expected**
- **People are working unreported overtime**

Forecasting to look for Potential Problems



Forecast function in Excel uses Linear Regression across preceding values

You are not allowed to account for more than 40 hours of work a week.

But to make your schedule, I have to work 60 hours

I don't care how much you actually work, only how much you report.

I wonder if Google is hiring.



Employee pay and company budgets are based on a 40 hour work week, but each programmer is actually required to work 48 hours a week.

So your projects are really about 16% more expensive than what you report.

Well no, because we aren't paying anyone for that extra work. We get it free.

I wonder if Google is hiring?

When are we getting the computer we need to finish the project?

We are over budget so the manager is waiting until the last minute to request money for the purchase.

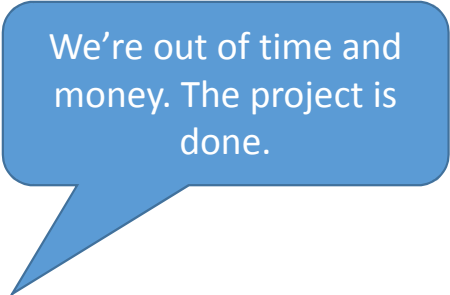
I'm just sitting here with nothing to do until the computer arrives. Want to take a long lunch?

We have a problem; we're not going to finish on time.


What can we put off until we catch up?

Push out the documentation and some of the requirements until we have handed off to the integration team. We should have time to get caught up before they are done with testing.

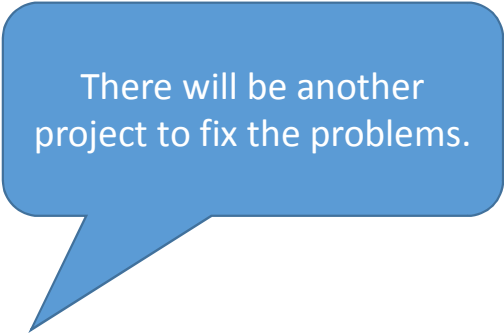




We're out of time and money. The project is done.



But we haven't tested it yet.



There will be another project to fix the problems.



What's his problem?

He just found out we are supporting another project that isn't complete.

Why are incomplete projects being sent to operations?

Because they have to meet a budget and we are just funded to work. So they finish on time and we clean up the mess.

Wrap Up

Approach can be used by any project or team

Project or team progress can be rolled up to any level

Team members do not have to change how they work

Does not require all requirements be discovered up front

Contact

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<http://www.geriwinters.com>

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- Tool

<https://trax-progress.com>

- Samples

<https://trax-progress.com/Agile2017/OnePortfolioProgressReport-Samples.zip>

2 of my books are in
the Agile 2017
bookstore!

Drop in and check
them out!