

Reporting Status to Management

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2011 TSP Symposium

Background

(in which we set the stage)



Background

- Introduced TSP to the project in May 2010
- Initial launch 4/26/2010
 - 11 team members, all developers
- Today
 - 20 team members, developers and testers
- This is the best team ever.

Project Start

- 2 part project or 2 separate projects
 - Feasibility
 - New hardware support
 - New customer features
 - Maintenance
 - Standard maintenance cycle
 - “Emergency” release
- Test team is part of the TSP team.

Tidbit

We usually do iteration retrospective and re-launches in one day

- These are really intense for the team
- We take technical breaks
 - Teammates are encouraged to prepare a 5 minute technical presentation on something they worked on during the previous iteration.
 - Presentations are given throughout the day.
- Allows us to take breaks from all the “process” stuff
- Team members really enjoy showing what they have accomplished.

The Struggle with Reports

- Too much data (yes there is such thing)
 - Makes it difficult to identify what is necessary versus what is needed
 - Not all data needs to be communicated
- Conflicting requests: what is being asked vs. what is really needed.
 - Management may ask for some type of data but that is not what they need,
 - Management needs to be trained to understand what is available to them and what it means
- Expectations vs. Reality
 - Management expects that TSP will resolve traditional process issues from the get go.
- It takes a while to get meaningful data
 - It is not possible to evaluate with certainty the quality of a release before our customers get their hands on our product.
 - Historical data is needed in order to plan for the future
- Not all projects are the same or require the same information.

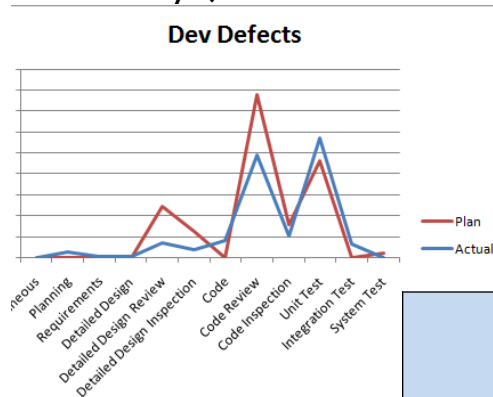
Identifying What is Important for Management

- We sat down with management and proposed four traditional reports
 - Schedule
 - Scope
 - Quality
 - Risks and Issues
- Management agreed, but wanted data for each release

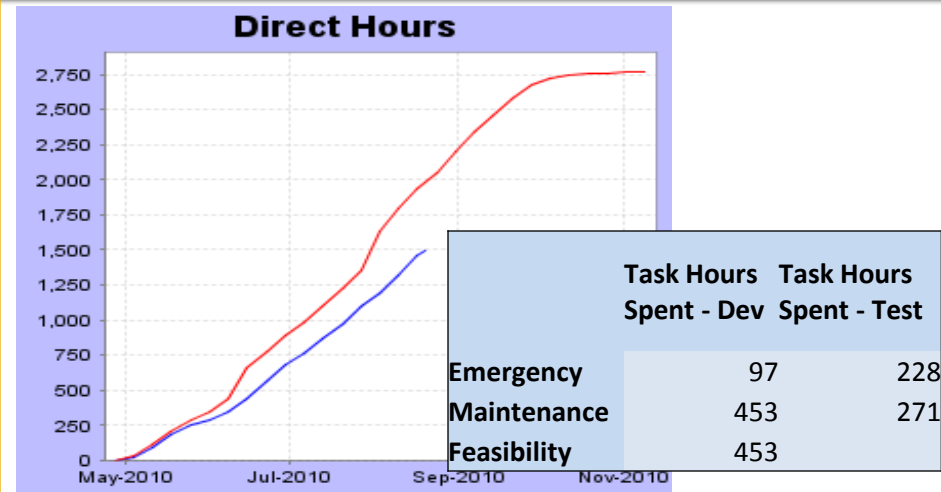
Weekly Status

Milestone	Current Commitment	% Dev Complete	% Test Complete
Emergency	09/01/2010	100%	60%
Maintenance Feature Complete	10/15/2010	55%	
Maintenance Code Complete	11/15/2010		
Maintenance System Software Release to MFG	02/15/2011		
Feasibility Exit	10/30/2010	53%	N/A
Feasibility Code Complete	2012	N/A	N/A

Quality (To-Date Defects Removed)



	Defects Removed - Dev	Defects Removed - Test
Emergency	31	16
Maintenance	142	59
Feasibility	118	



To-Date Scope Change

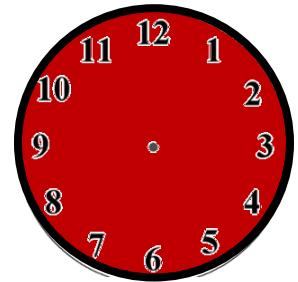
Unplanned "emergency" release
 26% scope increase in maintenance
 58% scope increase in feasibility

Not Satisfactory

- Management was still not happy
- Neither was the team or team leader
 - Too much available data
 - Difficulty determining bottom line
 - So we are late, why? And what can we do about it?
 - What do the quality numbers really mean?
- At this time, role managers took over
 - Planning manager creates weekly report for team meeting
 - Quality manager does the same
 - Team leader customizes these reports for management

Tidbit

- With a 16 member team our weekly TSP meeting lasts an average of 35 minutes.
- Following our script we go through
 - A plan status update
 - Team member status update
 - Quality status update
 - Risk report
 - Action item review
- Awesome role managers are key



Planning Manager Report

(with thanks to our awesome planning manager)

When Are We Going To Be Done*?

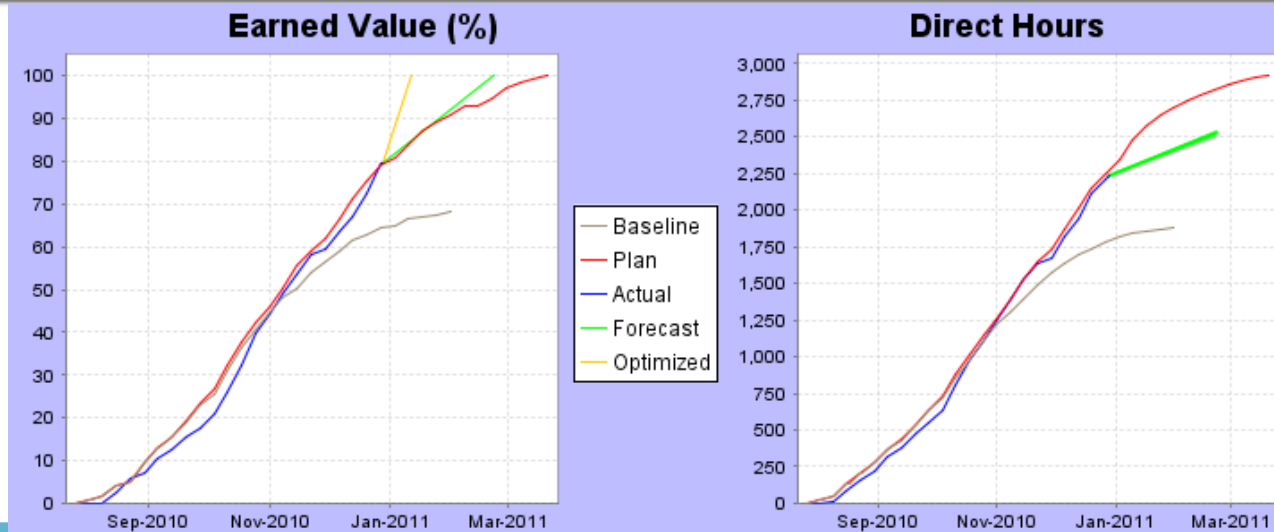
		Planned Completion Date	Optimized Completion Date
Original: What did we have at relaunch?		Jan 30, 2011	
Last Week	Forecast	March 20, 2011	Jan 4, 2011
	Replan	Feb 9, 2011	Jan 9, 2011
This Week	Forecast	March 20, 2011	Jan 9, 2011
	Replan	Feb 14, 2011	Jan 12, 2011

Bottom Line:

- With no rebalancing or increase to task hours, we won't be done until March 20, 2011.
- If the schedule was perfectly load balanced between all team members we can be done:
 - Jan 9, if we catch up to plan (make up for hours we've already missed)
 - Jan 12, assuming we meet planned task hours.

*Done = code complete. All bugs/enhancements tested and closed.

Plan Growth – Week Ending 12/27



Plan Growth (hours)	Base	Last Week	This Week	Change Since Last Week	%Growth Total
Feature 1	138	519	536	+17	288%
Feature 2	0	44.5	50.5	+6	N/A
Feature 3	489	507.5	521	+13.5	6.5%
Test	949	1100	1192.5	+92.5	26%
Overall	1576	2171	2300	+129	46%

Statement of Release Content




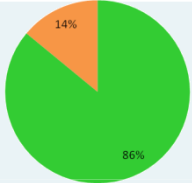
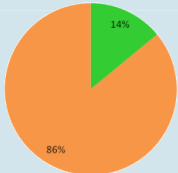
What's in:

- Loading of essential information from Special file
- Implementation of complex calculations
- Diagnostic Copy To Disk
- Data capture Simulation (Needed for verification)
- Data dependent customer reports.
- 'Light' user scenario regression testing
- Capability to prevent a special file from being loaded on old software.
- Additional platform 2 important Change

What's out:

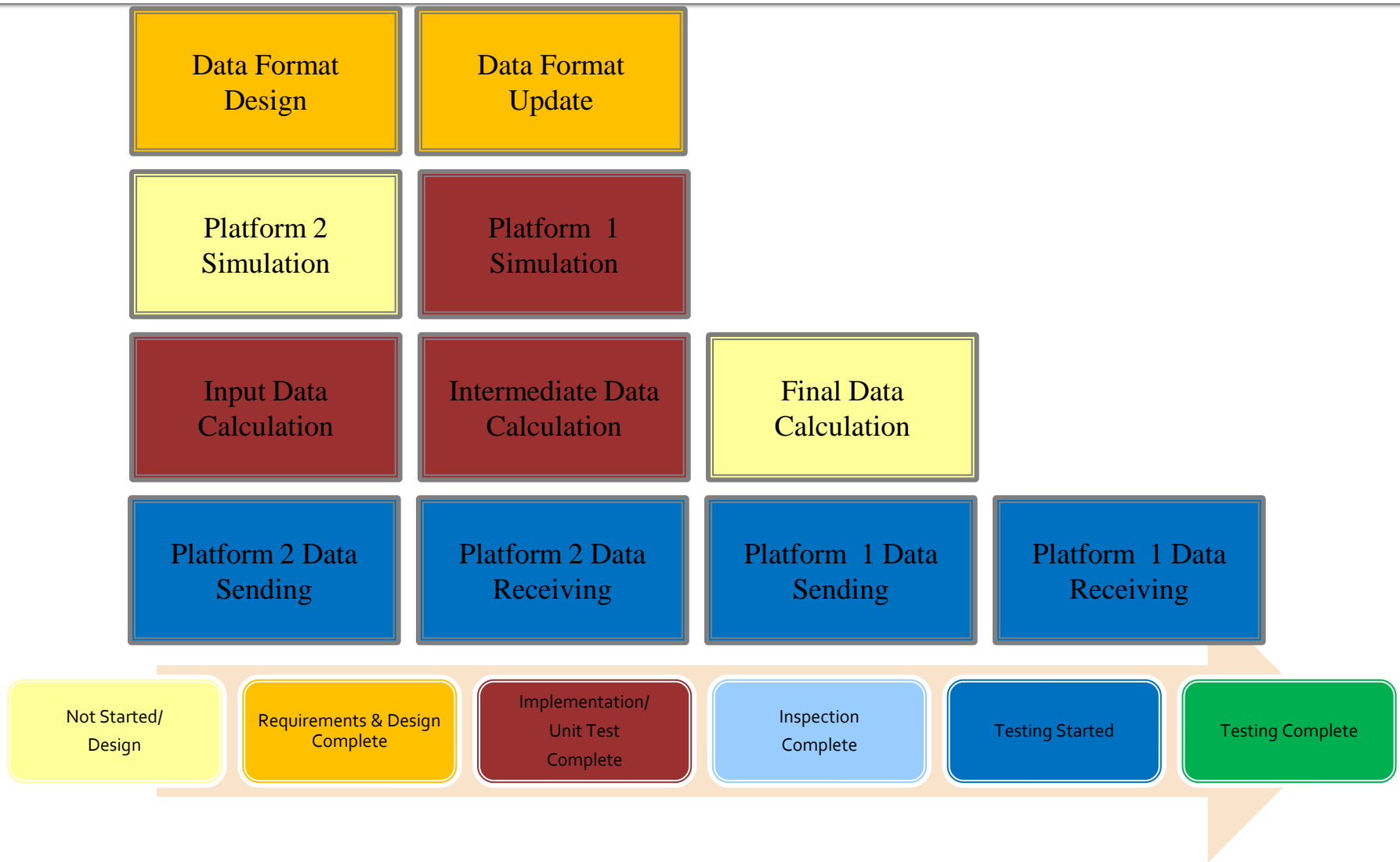
- Platform 2 alternate operating system support
- Visual warnings when data out of range (still get a simple notification).
- Automatic expiration of current information when loading special file with changes in strategy.
- Help System Updates
- Remote Support updates

Project Milestones

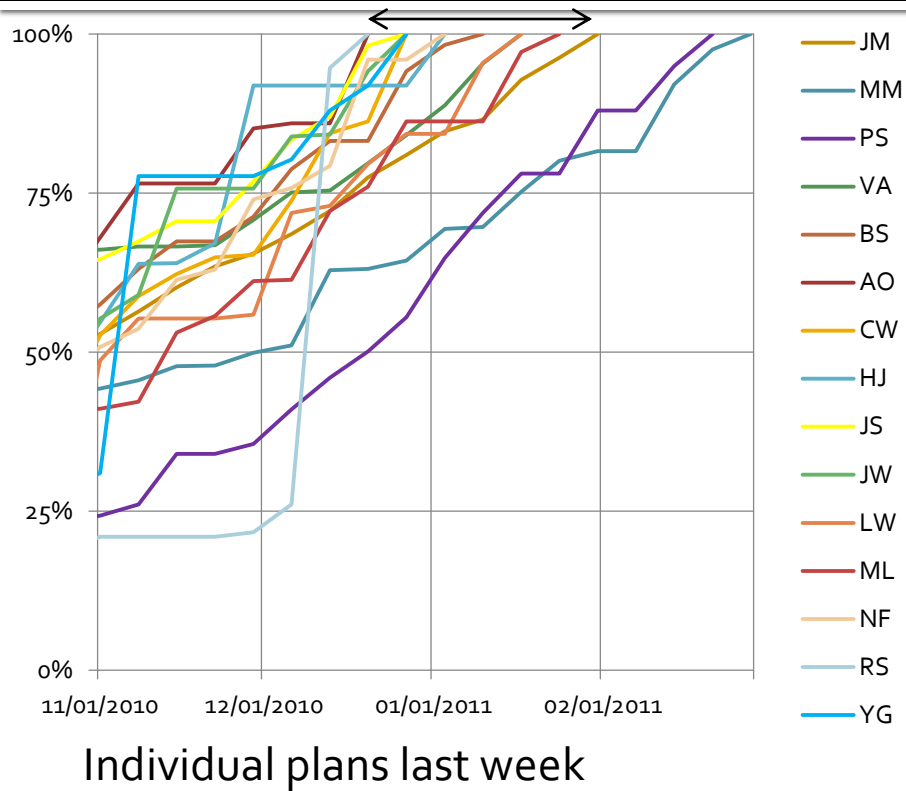
	Target	Description	Work Items	Projected Week Change
M1: Data Collection (both platforms) 10 Work Items	June 3	<ul style="list-style-type: none"> •Merge Hummingbird •Gather Data From Instrument •Store Data on the Console •Merge Penguin to Main Branch •Simulate important Data (platform 1) 		Completed June 22.
M2: Calc. & Config. (platform 1) 38 Work Items	July 8 th	<ul style="list-style-type: none"> •Data files Design and Processing •Simulate important Data (platform 2) •Input Data Calculation •Output data Calculation •DCTD 		Completed July 14.
Milestone 3: Calc. & Config (platform 2) 23 Work Items	August 19 th	Merge M2 to platform 2 Platform 2-specific changes		Completed August 18
Milestone 2.1 (platform 1)	August 19 th	Regression and Validation testing of or platform 1, release.		August 29 -5 Days
Milestone 3.1 (platform 2)	August 25 th	Regression and Validation testing of platform 2 OS1, release.		September 11

For all team milestones, 'Done' is TESTED & CLOSED!

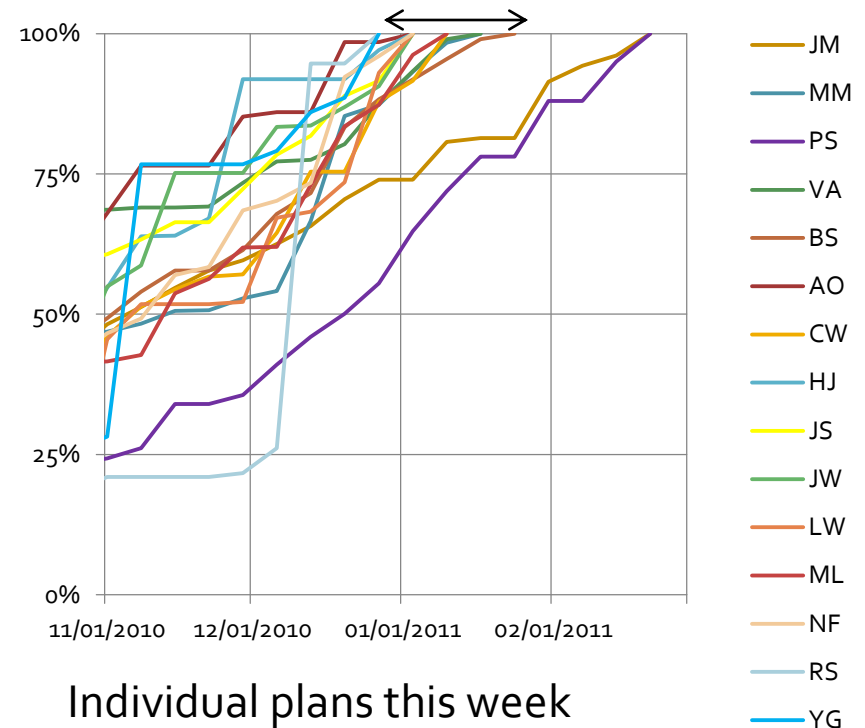
Module Progress



Tidbit on Load Balancing



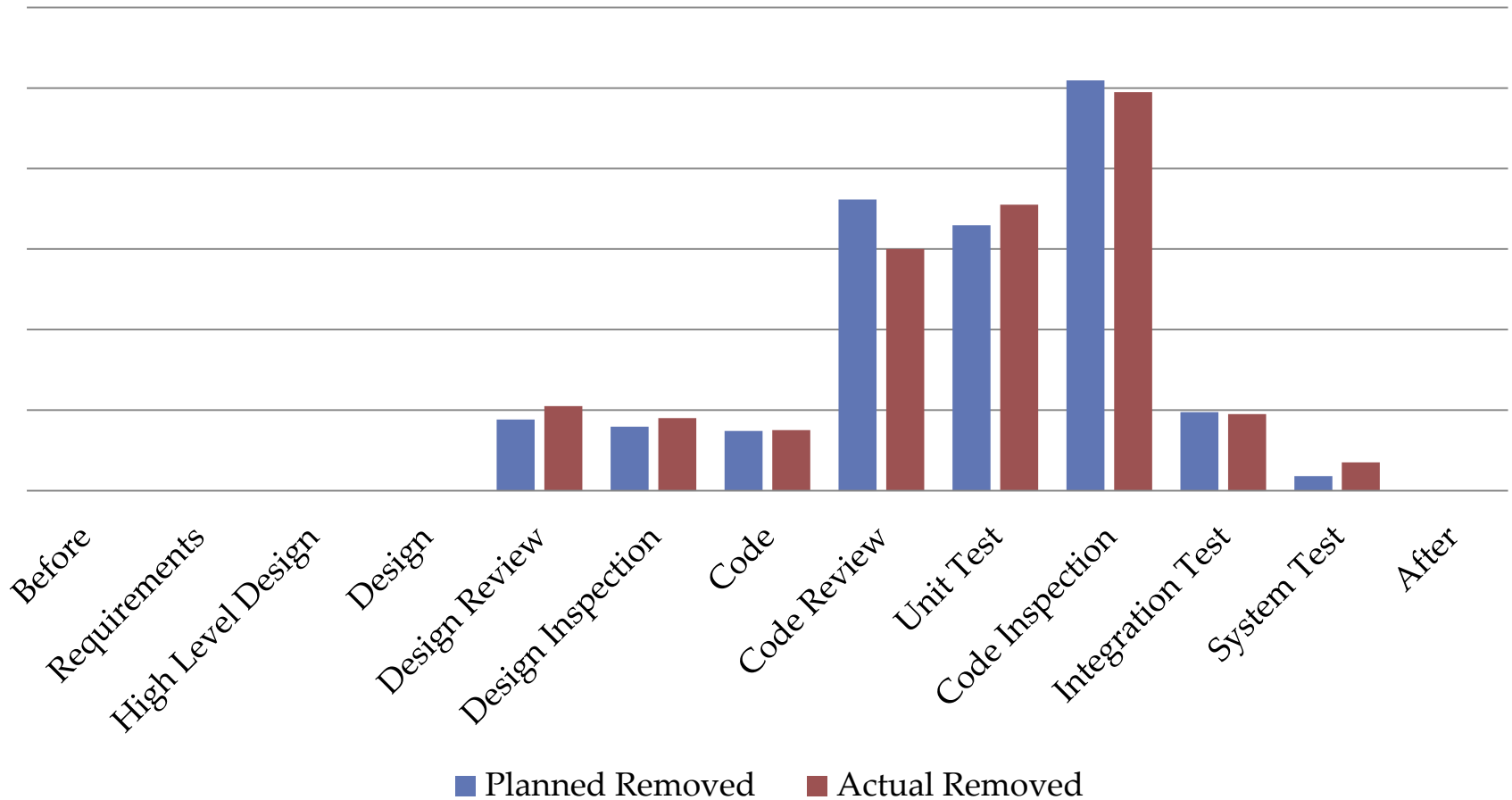
Each week we take a snapshot of individual plans, and compare to previous week.



Quality Report

(with thanks to our awesome quality manager)

Planned vs. Actual Defects Removed



Plan vs. Actual

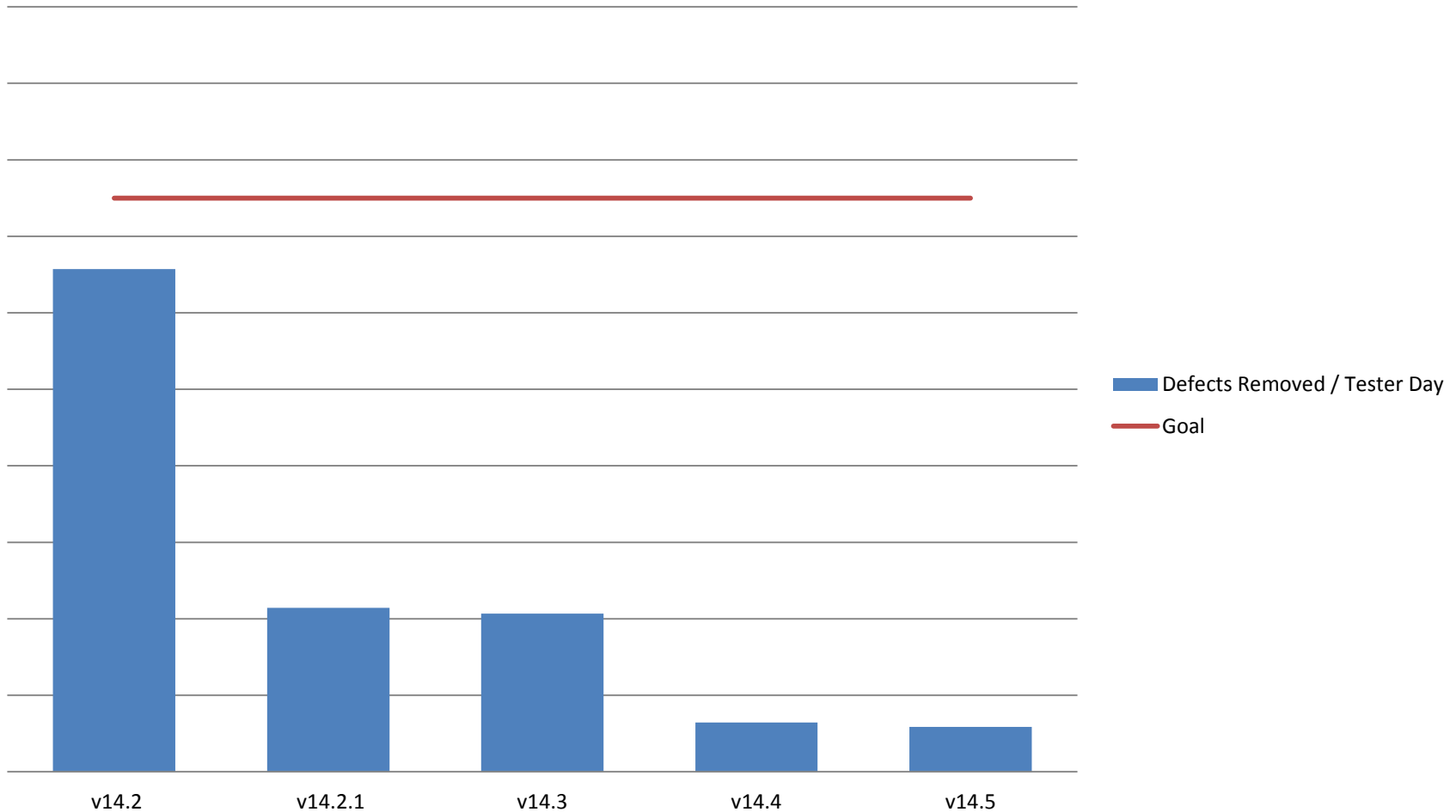
	Plan	Actual	Plan/Actual	In English
Defect Injection Rate	---	106.5%	---	Based on how much time we have spent in the development process, we've found 106.5% of the defects we planned to.
Total Operational Defects Found	156	213	136.6%	We have found 136.6% of the planned operational defects after writing 120.9% of the planned code.
New/Changed LOC	15,875	19,189	120.9%	We have written 120.9% of the planned code in
Total Hours	1,474	1,426	96.7%	96.7% of the planned time.
Development Time Percent	75.0%	79.8%	6.4%	We estimated that we would spend 75% of the planned time in the development process, but we actually have spent 79.8% of the planned time in the development process.

Remaining Defects Estimation

	Int Test	Sys Test
Estimated Defects / KLOC	0.19	0.09
Est. Total Remaining Defects	X.XX	X.XX

Important Metric

Defects Removed In System Test per Tester Day



Tidbits

- Recognize special behavior
- Recognize extra effort
- Recognize good team work
- Recognize technical achievement
- Add prizes (candy bars)



ACHIEVEMENT UNLOCKED
Penguin Hatched

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Current Status

(but management wants even more)

Future Requirements

- Organizational Leadership requires detailed schedules in a Microsoft project format. This does not easily map to WBS.
- We are often challenged to deliver sooner, yet the scope increases.
- Managing dependencies with other departments.

Acknowledgements

- We want to thank one of the most amazing teams we have worked with
 - Planning Manager
 - Process Manager
 - Quality Manager
- We also thank management for always pushing us to do better: they really want to understand project status!

Questions?

- Contact
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