Wie entwickelt Microsoft in der Developer Division?

Formal or Agile?

Christian Binder
Senior Platform Strategy Manager
Microsoft

Agile Software Development is an important trend for our industry

Facts about Microsoft Development

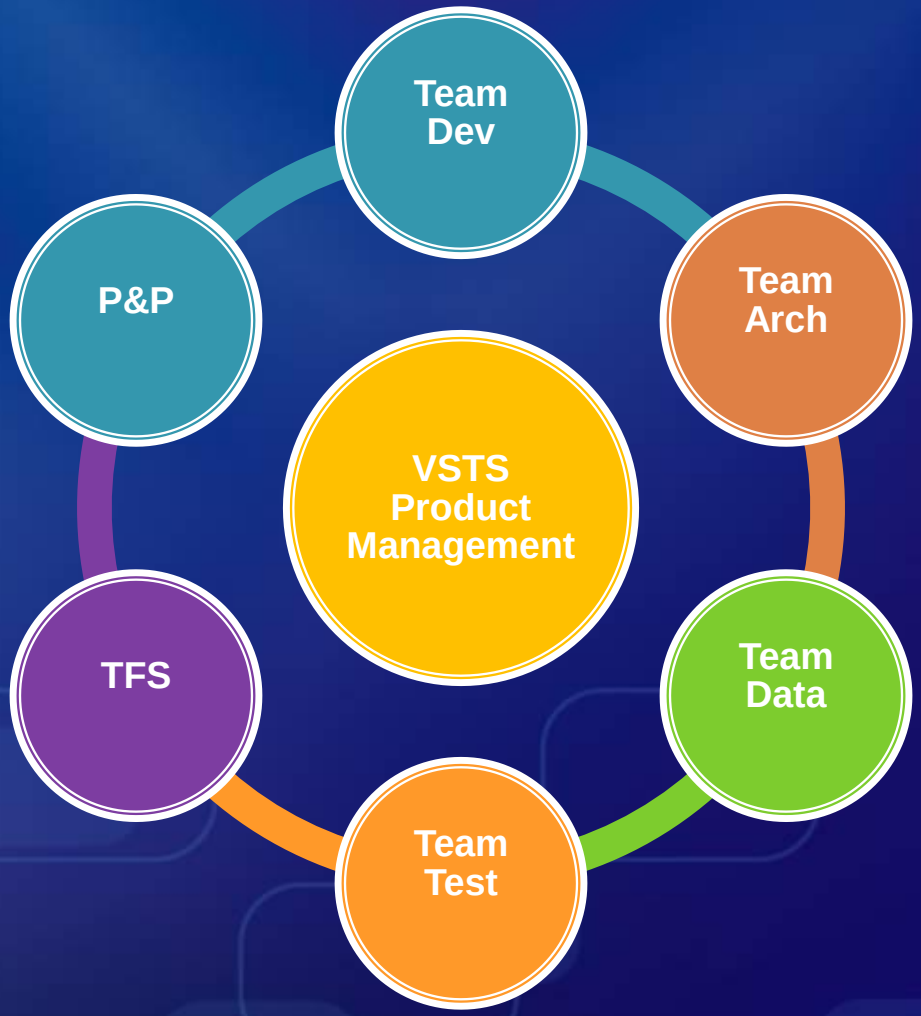
Developer Division

- Largest instance at Microsoft

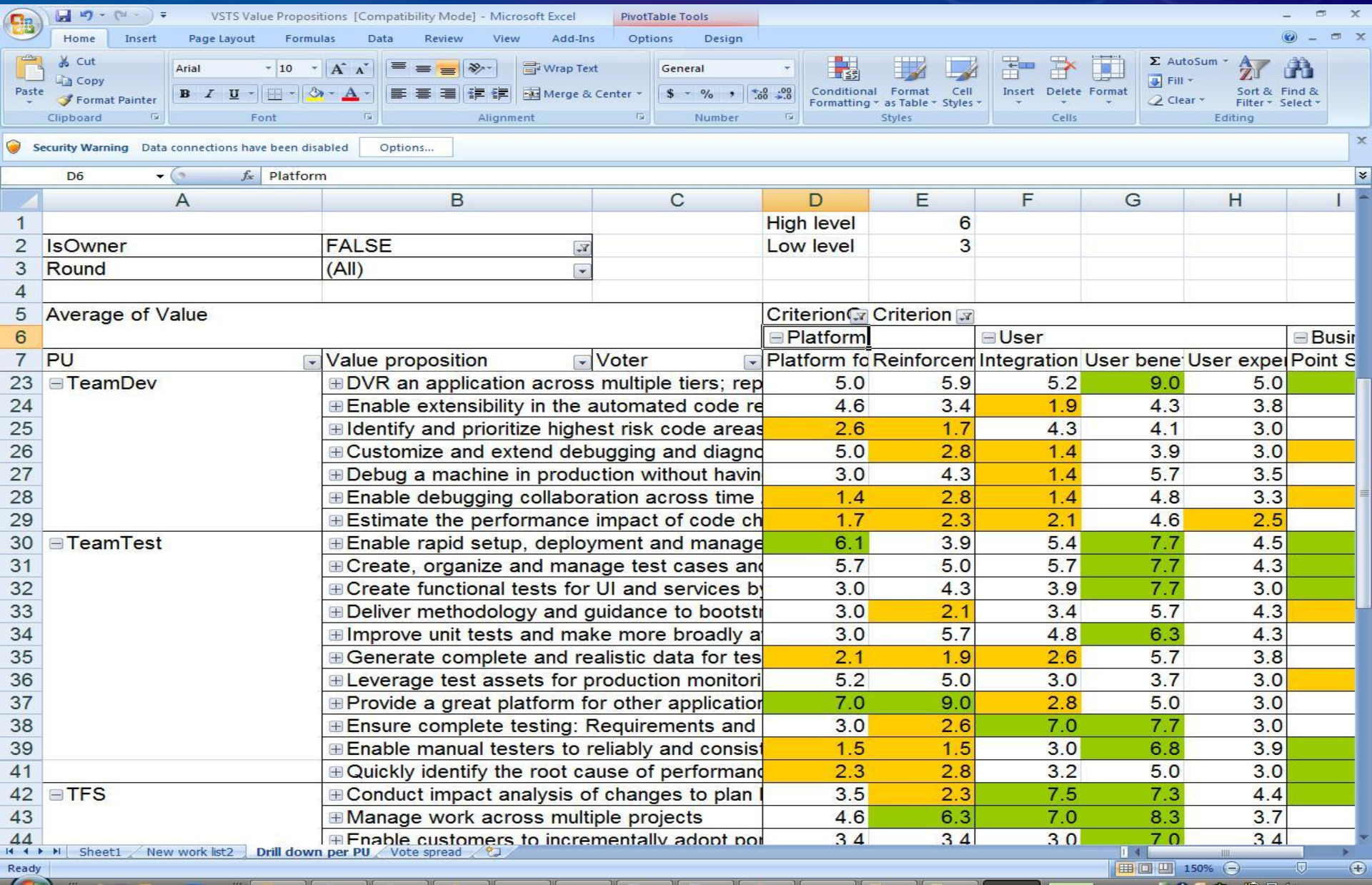
Recent Users	3,284
Work Items	581,670
Work Item Versions	4,156,617
Source Control Files	19,436,830
Compressed File Size	3.3 TB
Builds	29,815

Getting started on a release

VSTS 2010 Product Units



VSTS 2010 Planning



VSTS Value Propositions [Compatibility Mode] - Microsoft Excel

Security Warning Data connections have been disabled Options...

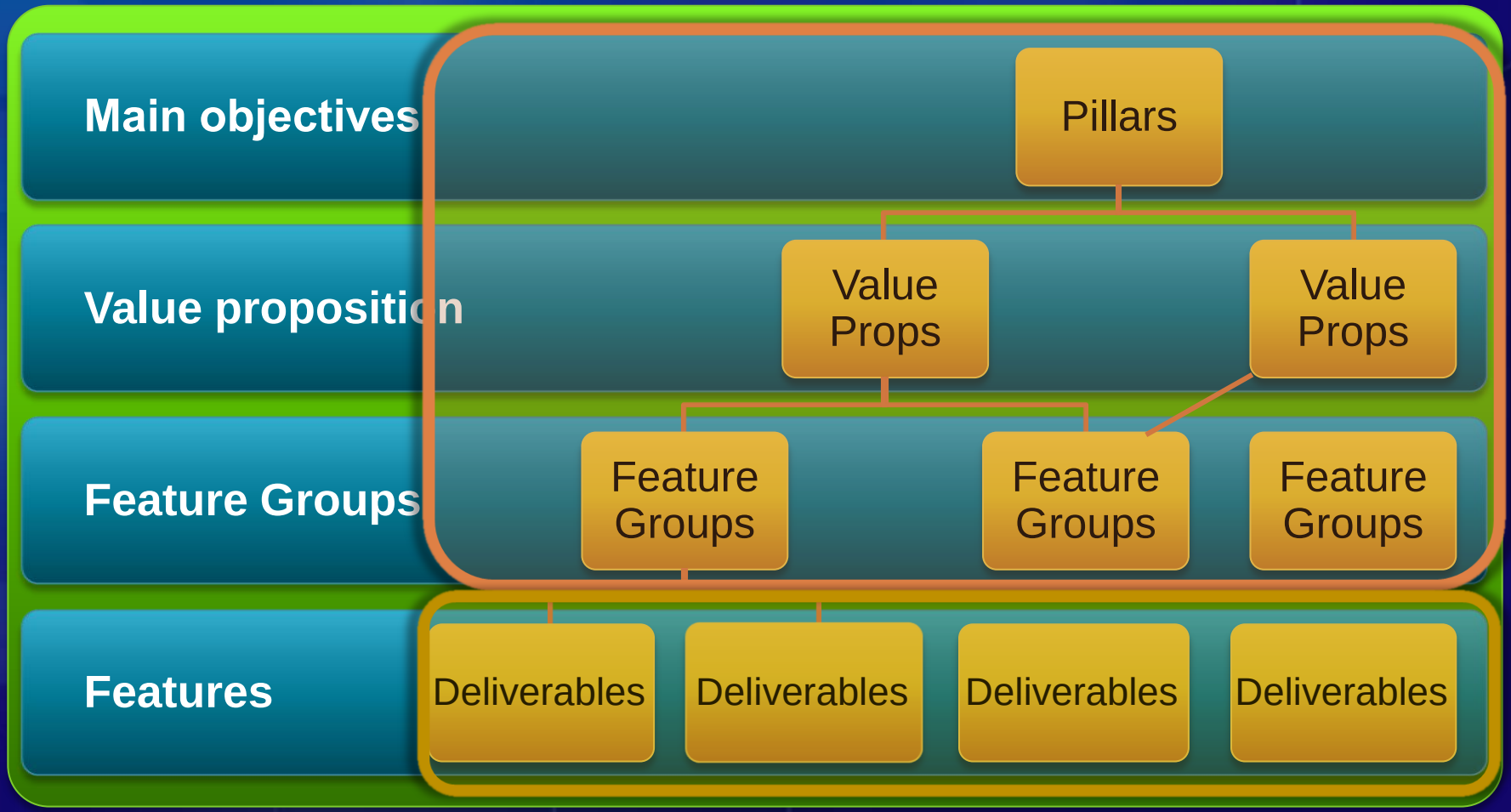
D6 Platform

	A	B	C	D	E	F	G	H	I
1				High level	6				
2	IsOwner	FALSE		Low level	3				
3	Round	(All)							
4									
5	Average of Value			Criterion	Criterion				
6				Platform		User			Busi
7	PU	Value proposition	Voter	Platform fo	Reinforcem	Integration	User bene	User expe	Point S
23	TeamDev	DVR an application across multiple tiers; rep		5.0	5.9	5.2	9.0	5.0	
24		Enable extensibility in the automated code re		4.6	3.4	1.9	4.3	3.8	
25		Identify and prioritize highest risk code areas		2.6	1.7	4.3	4.1	3.0	
26		Customize and extend debugging and diagnc		5.0	2.8	1.4	3.9	3.0	
27		Debug a machine in production without havin		3.0	4.3	1.4	5.7	3.5	
28		Enable debugging collaboration across time		1.4	2.8	1.4	4.8	3.3	
29		Estimate the performance impact of code ch		1.7	2.3	2.1	4.6	2.5	
30	TeamTest	Enable rapid setup, deployment and manage		6.1	3.9	5.4	7.7	4.5	
31		Create, organize and manage test cases and		5.7	5.0	5.7	7.7	4.3	
32		Create functional tests for UI and services by		3.0	4.3	3.9	7.7	3.0	
33		Deliver methodology and guidance to bootstr		3.0	2.1	3.4	5.7	4.3	
34		Improve unit tests and make more broadly a		3.0	5.7	4.8	6.3	4.3	
35		Generate complete and realistic data for tes		2.1	1.9	2.6	5.7	3.8	
36		Leverage test assets for production monitori		5.2	5.0	3.0	3.7	3.0	
37		Provide a great platform for other applicatior		7.0	9.0	2.8	5.0	3.0	
38		Ensure complete testing: Requirements and		3.0	2.6	7.0	7.7	3.0	
39		Enable manual testers to reliably and consist		1.5	1.5	3.0	6.8	3.9	
41		Quickly identify the root cause of performanc		2.3	2.8	3.2	5.0	3.0	
42	TFS	Conduct impact analysis of changes to plan		3.5	2.3	7.5	7.3	4.4	
43		Manage work across multiple projects		4.6	6.3	7.0	8.3	3.7	
44		Enable customers to incrementally adopt por		3.4	3.4	3.0	7.0	3.4	

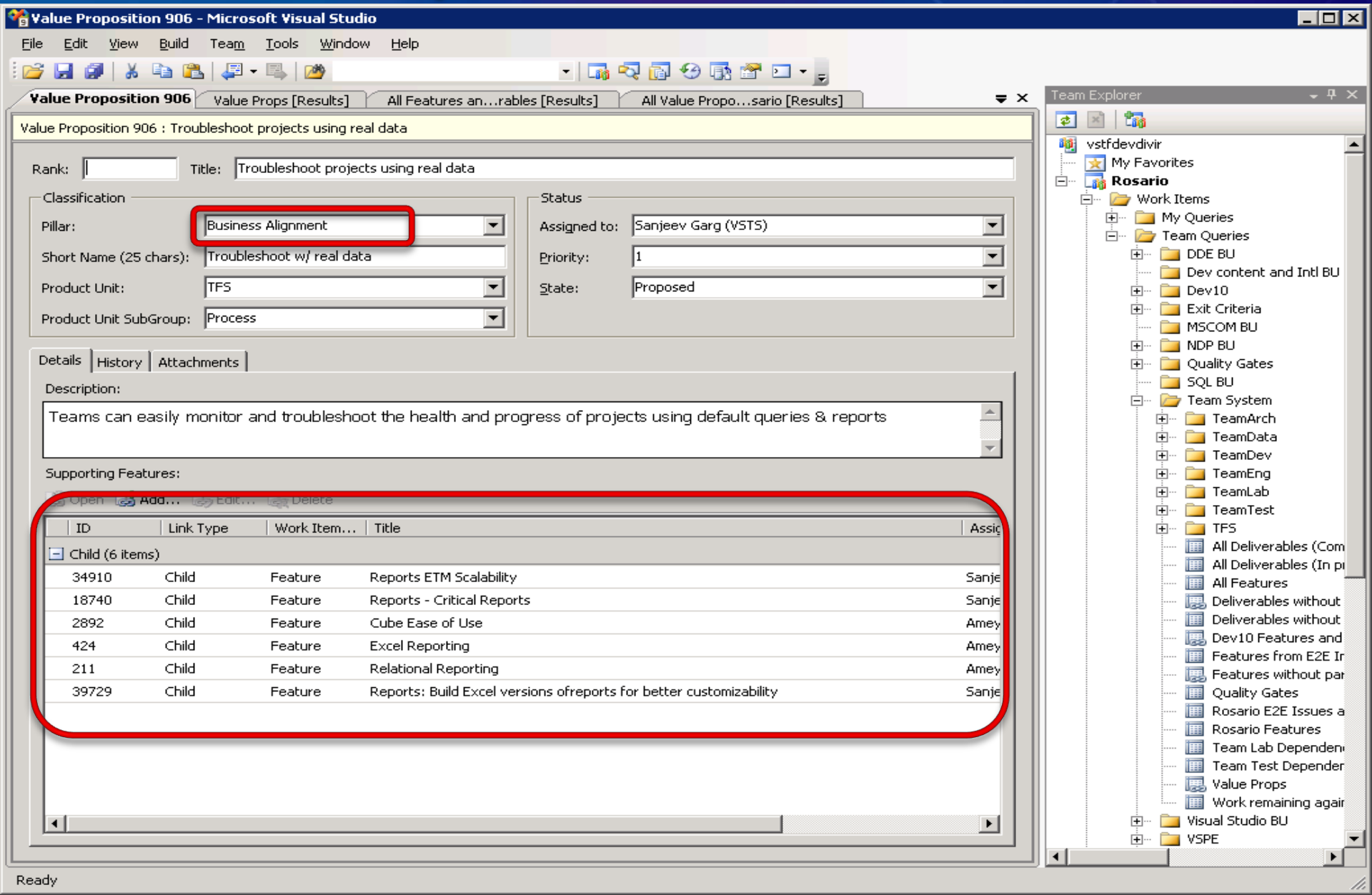
Sheet1 New work list2 Drill down per PU Vote spread

Ready 150%

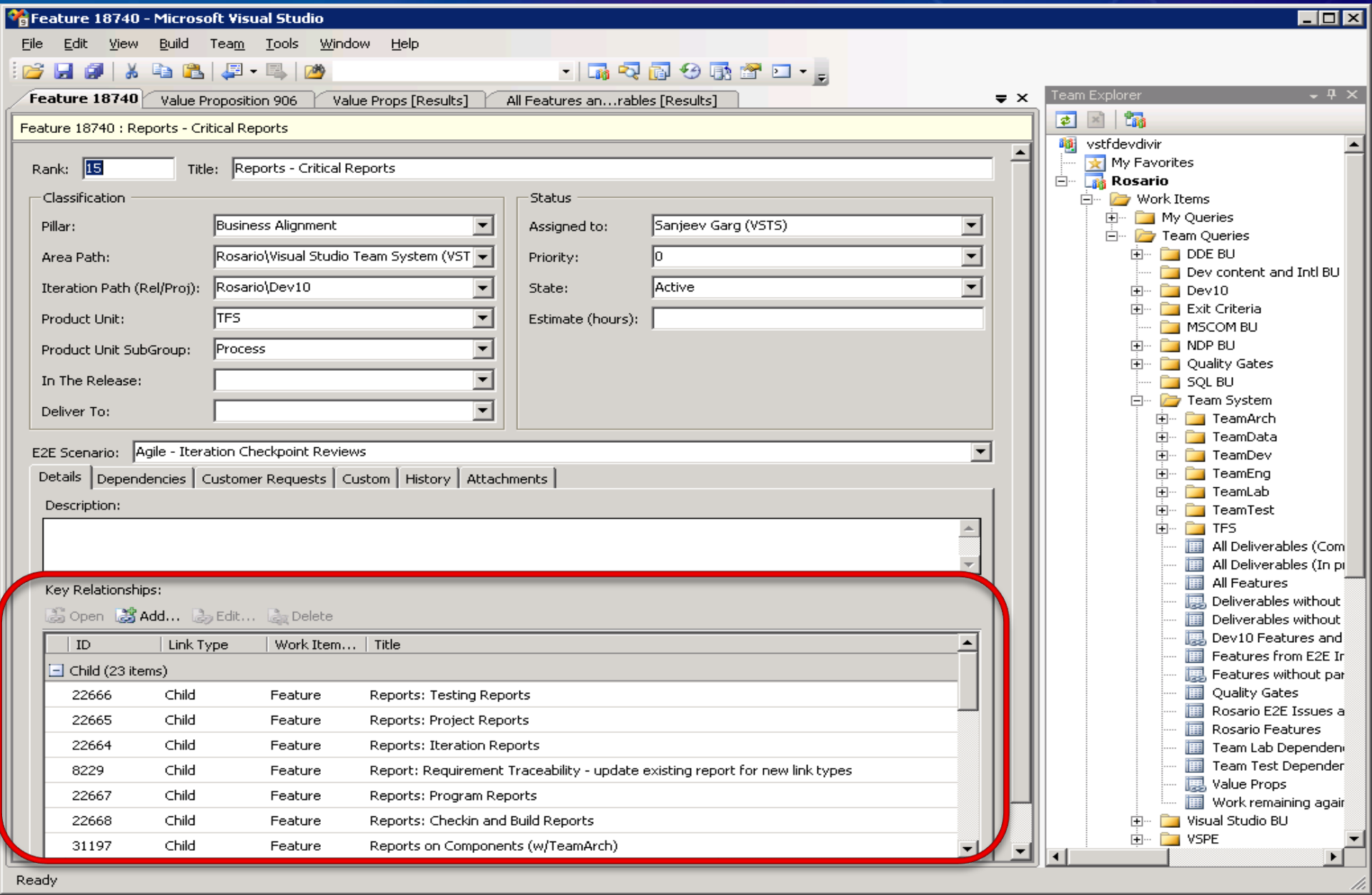
Our Process – VS 2010



Value Propositions



Features


Feature 18740 - Microsoft Visual Studio
File Edit View Build Team Tools Window Help
Feature 18740
Value Proposition 906
Value Props [Results]
All Features an...rables [Results]
Feature 18740 : Reports - Critical Reports
Rank: 15
Title: Reports - Critical Reports
Classification
Pillar: Business Alignment
Area Path: Rosario\Visual Studio Team System (VST
Iteration Path (Rel/Proj): Rosario\Dev10
Product Unit: TFS
Product Unit SubGroup: Process
In The Release:
Deliver To:
Status
Assigned to: Sanjeev Garg (VSTS)
Priority: 0
State: Active
Estimate (hours):
E2E Scenario: Agile - Iteration Checkpoint Reviews
Details Dependencies Customer Requests Custom History Attachments
Description:
Key Relationships:
Open Add... Edit... Delete
ID Link Type Work Item... Title
Child (23 items)
22666 Child Feature Reports: Testing Reports
22665 Child Feature Reports: Project Reports
22664 Child Feature Reports: Iteration Reports
8229 Child Feature Report: Requirement Traceability - update existing report for new link types
22667 Child Feature Reports: Program Reports
22668 Child Feature Reports: Checkin and Build Reports
31197 Child Feature Reports on Components (w/TeamArch)
Team Explorer
vstfdevdivir
My Favorites
Rosario
Work Items
My Queries
Team Queries
DDE BU
Dev content and Intl BU
Dev10
Exit Criteria
MSCOM BU
NDP BU
Quality Gates
SQL BU
Team System
TeamArch
TeamData
TeamDev
TeamEng
TeamLab
TeamTest
TFS
All Deliverables (Com
All Deliverables (In pr
All Features
Deliverables without
Deliverables without
Dev10 Features and
Features from E2E Ir
Features without par
Quality Gates
Rosario E2E Issues a
Rosario Features
Team Lab Dependen
Team Test Depender
Value Props
Work remaining agair
Visual Studio BU
VSPE
Ready

Agile Workbooks

demo

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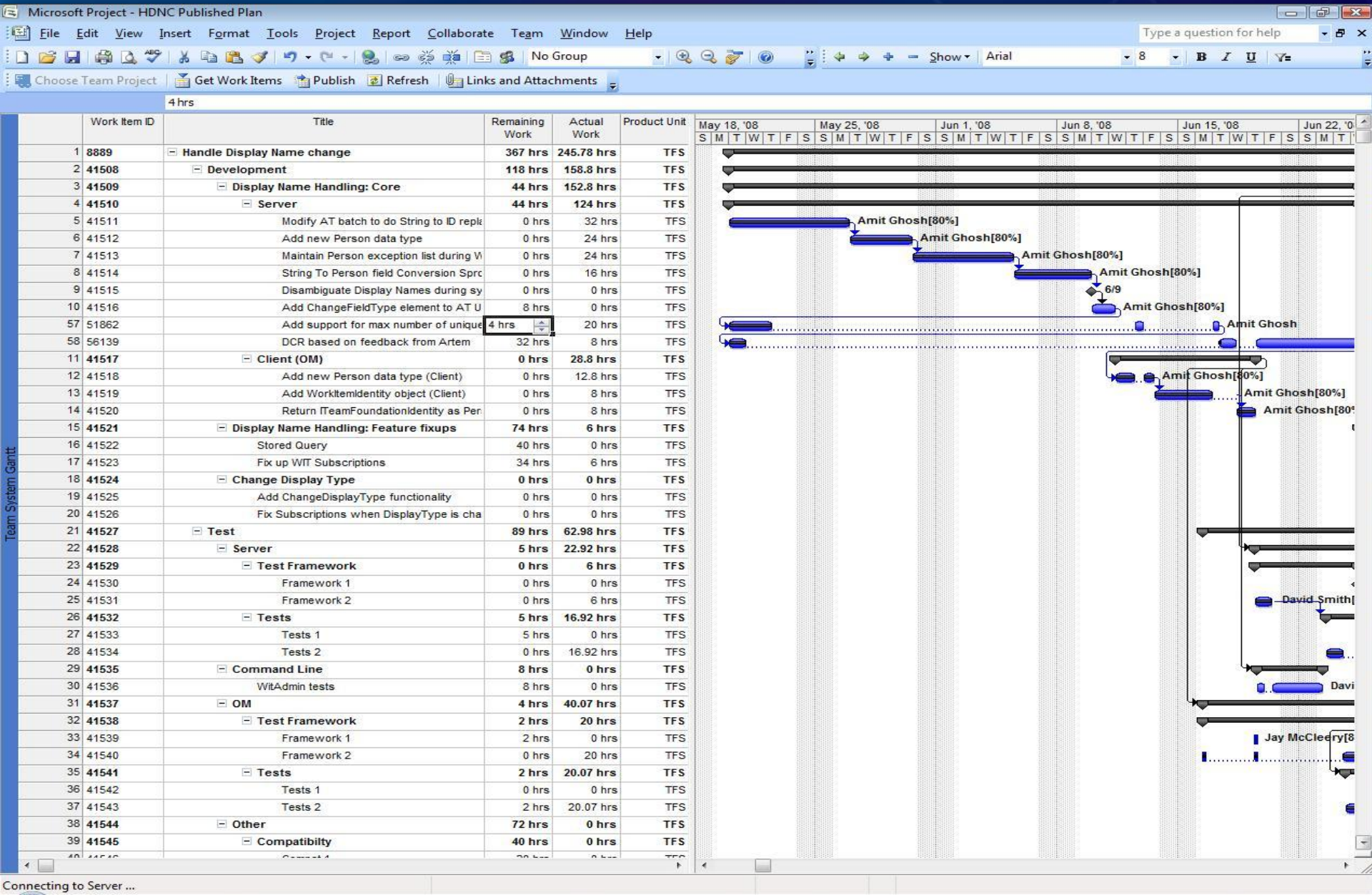
Tracking Tasks In Microsoft Project



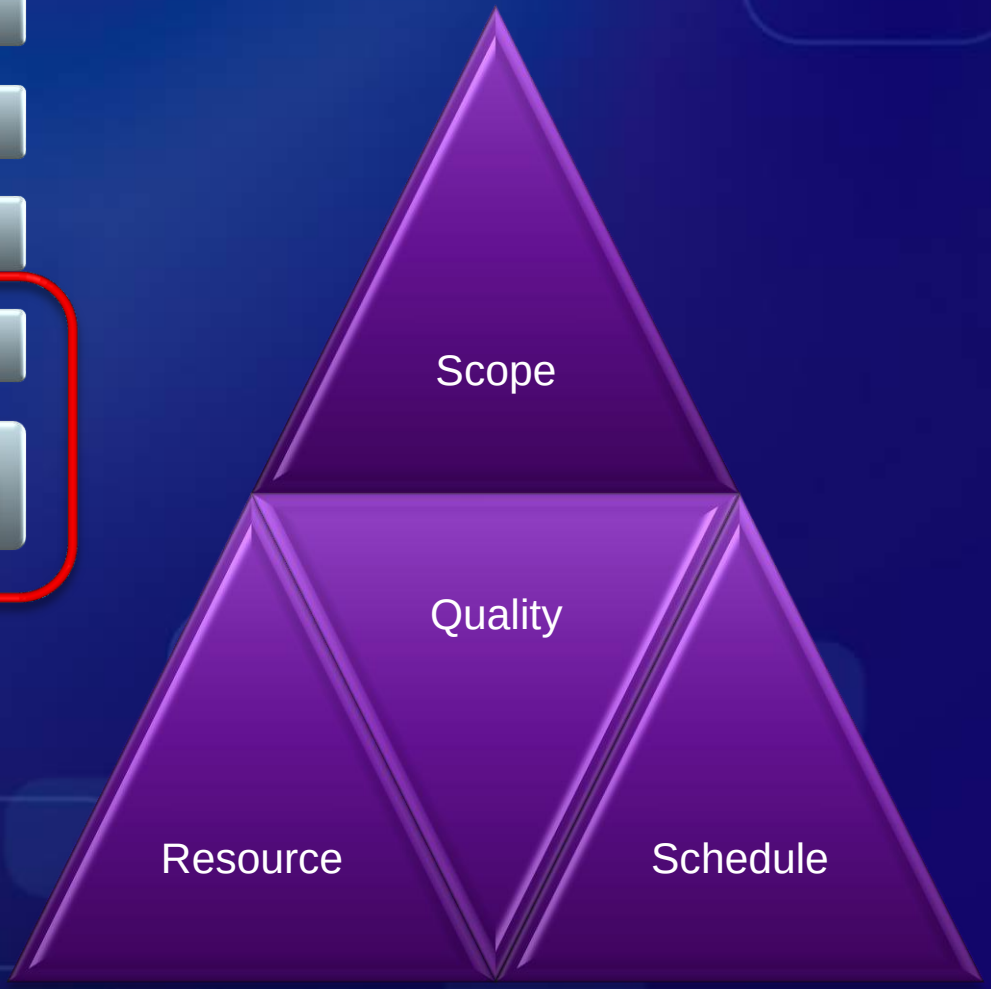
	Work Item ID	Title	Remaining Work	Actual Work	Product Unit
1	**8889**	**Handle Display Name change**	**367 hrs**	**245.78 hrs**	**TFS**
2	**41508**	**Development**	**118 hrs**	**158.8 hrs**	**TFS**
3	**41509**	**Display Name Handling: Core**	**44 hrs**	**152.8 hrs**	**TFS**
4	**41510**	**Server**	**44 hrs**	**124 hrs**	**TFS**
5	41511	Modify AT batch to do String to ID repla	0 hrs	32 hrs	TFS
6	41512	Add new Person data type	0 hrs	24 hrs	TFS
7	41513	Maintain Person exception list during W	0 hrs	24 hrs	TFS
8	41514	String To Person field Conversion Sprc	0 hrs	16 hrs	TFS
9	41515	Disambiguate Display Names during sy	0 hrs	0 hrs	TFS
10	41516	Add ChangeFieldType element to AT U	8 hrs	0 hrs	TFS
57	51862	Add support for max number of unique	4 hrs	20 hrs	TFS
58	56139	DCR based on feedback from Artem	32 hrs	8 hrs	TFS
11	**41517**	**Client (OM)**	**0 hrs**	**28.8 hrs**	**TFS**
12	41518	Add new Person data type (Client)	0 hrs	12.8 hrs	TFS
13	41519	Add WorkItemIdentity object (Client)	0 hrs	8 hrs	TFS
14	41520	Return ITeamFoundationIdentity as Per	0 hrs	8 hrs	TFS
15	**41521**	**Display Name Handling: Feature fixups**	**74 hrs**	**6 hrs**	**TFS**
16	41522	Stored Query	40 hrs	0 hrs	TFS
17	41523	Fix up WIT Subscriptions	34 hrs	6 hrs	TFS
18	**41524**	**Change Display Type**	**0 hrs**	**0 hrs**	**TFS**
19	41525	Add ChangeDisplayType functionality	0 hrs	0 hrs	TFS
20	41526	Fix Subscriptions when DisplayType is cha	0 hrs	0 hrs	TFS
21	**41527**	**Test**	**89 hrs**	**62.98 hrs**	**TFS**
22	**41528**	**Server**	**5 hrs**	**22.92 hrs**	**TFS**
23	**41529**	**Test Framework**	**0 hrs**	**6 hrs**	**TFS**
24	41530	Framework 1	0 hrs	0 hrs	TFS
25	41531	Framework 2	0 hrs	6 hrs	TFS
26	**41532**	**Tests**	**5 hrs**	**16.92 hrs**	**TFS**
27	41533	Tests 1	5 hrs	0 hrs	TFS
28	41534	Tests 2	0 hrs	16.92 hrs	TFS
29	**41535**	**Command Line**	**8 hrs**	**0 hrs**	**TFS**
30	41536	WitAdmin tests	8 hrs	0 hrs	TFS
31	**41537**	**OM**	**4 hrs**	**40.07 hrs**	**TFS**
32	**41538**	**Test Framework**	**2 hrs**	**20 hrs**	**TFS**
33	41539	Framework 1	2 hrs	0 hrs	TFS
34	41540	Framework 2	0 hrs	20 hrs	TFS
35	**41541**	**Tests**	**2 hrs**	**20.07 hrs**	**TFS**
36	41542	Tests 1	0 hrs	0 hrs	TFS
37	41543	Tests 2	2 hrs	20.07 hrs	TFS
38	**41544**	**Other**	**72 hrs**	**0 hrs**	**TFS**
39	**41545**	**Compatibilty**	**40 hrs**	**0 hrs**	**TFS**

Tracking Several Features

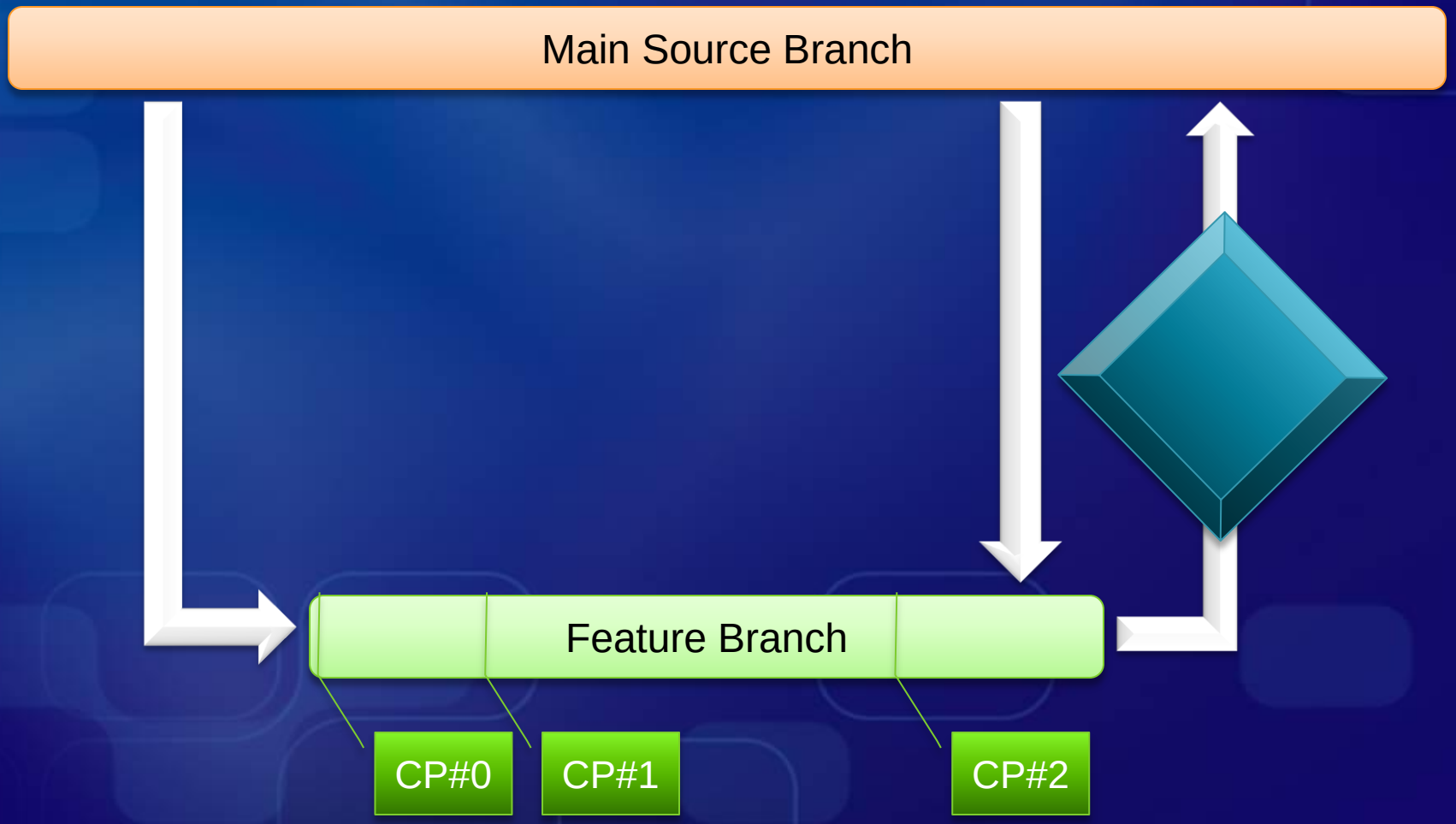
Title	End Date	Progress History
Finish Linking - Phase 1	05/20/08	87% 216
Rosario Reports: Phase 1	05/23/08	55% 37% 156
Version Control: Annotate to follow merges and branches	05/30/08	44% 54% 4
Version Control: Branch and Merge Visualization Phase 1	05/30/08	93% 7%
Version Control: Resolve (AutoMerge Preview)	05/30/08	48% 46% 10
Version Control: Introduce a TFS Properties Framework Service with a g	06/01/08	32% 169 (0)
Project Undo and Excel Formula/Format/Font Persistence	06/06/08	31% 50% 204
High Quality Builds with Instant Feedback	06/06/08	26% 34% 667
Word: Online Sync with TFS with Publish/Refresh; Authoring Templates &	06/12/08	22% 446 (0)
Version Control: New Apply/Edit Label dialog	06/13/08	18% 5% 176 (56)
Web Access: Phase 2 - Reusability and Scalability Architecture	06/26/08	19% 49% 321 (200)
Handle Display Name change	07/14/08	564
ETM - WSS ETM Awareness + Flexibility	07/31/08	29% 28% 736

How to drive consistent Quality in a Huge Team?

The Feature Crew Model



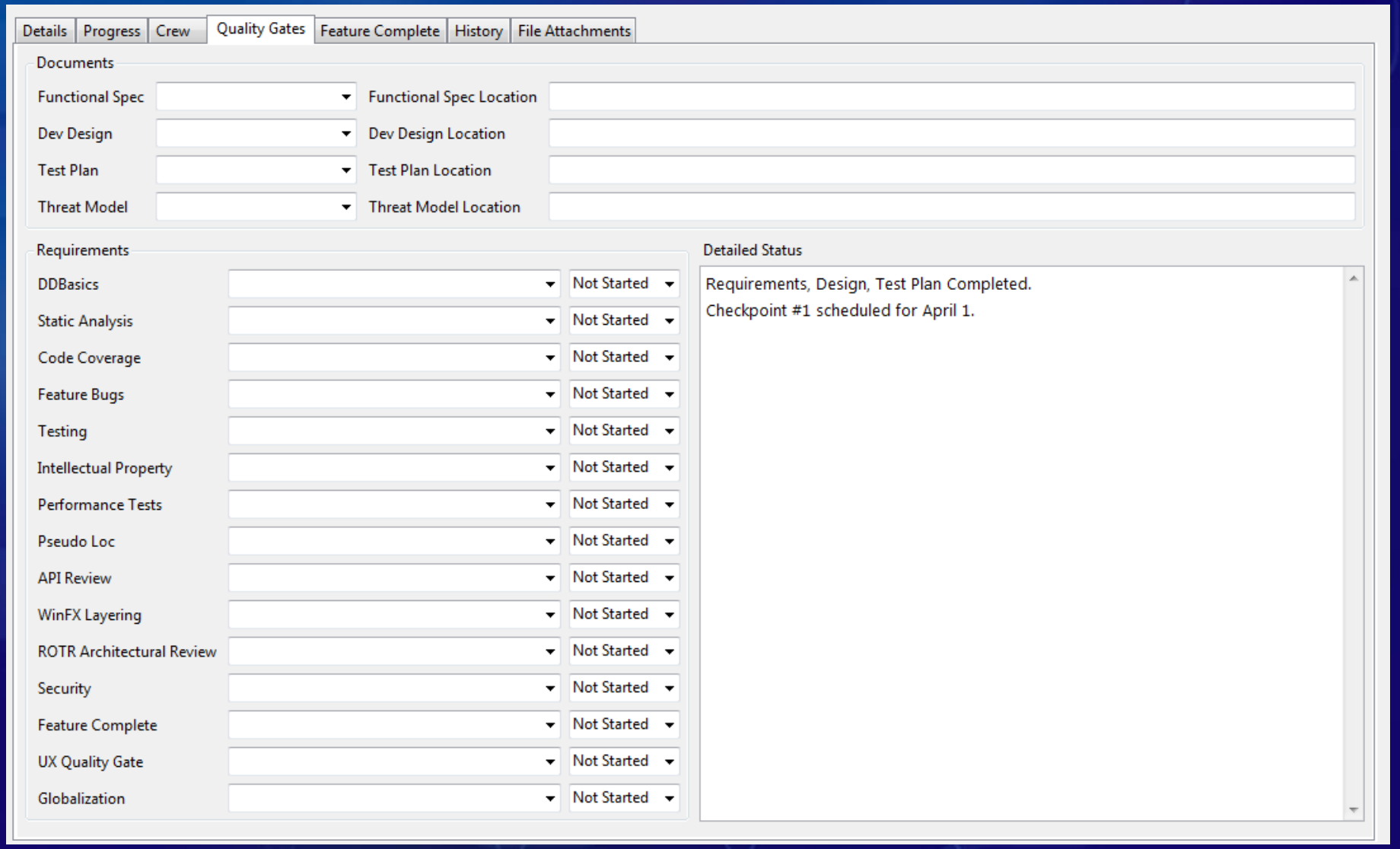
Feature Life Cycle



Quality Gates

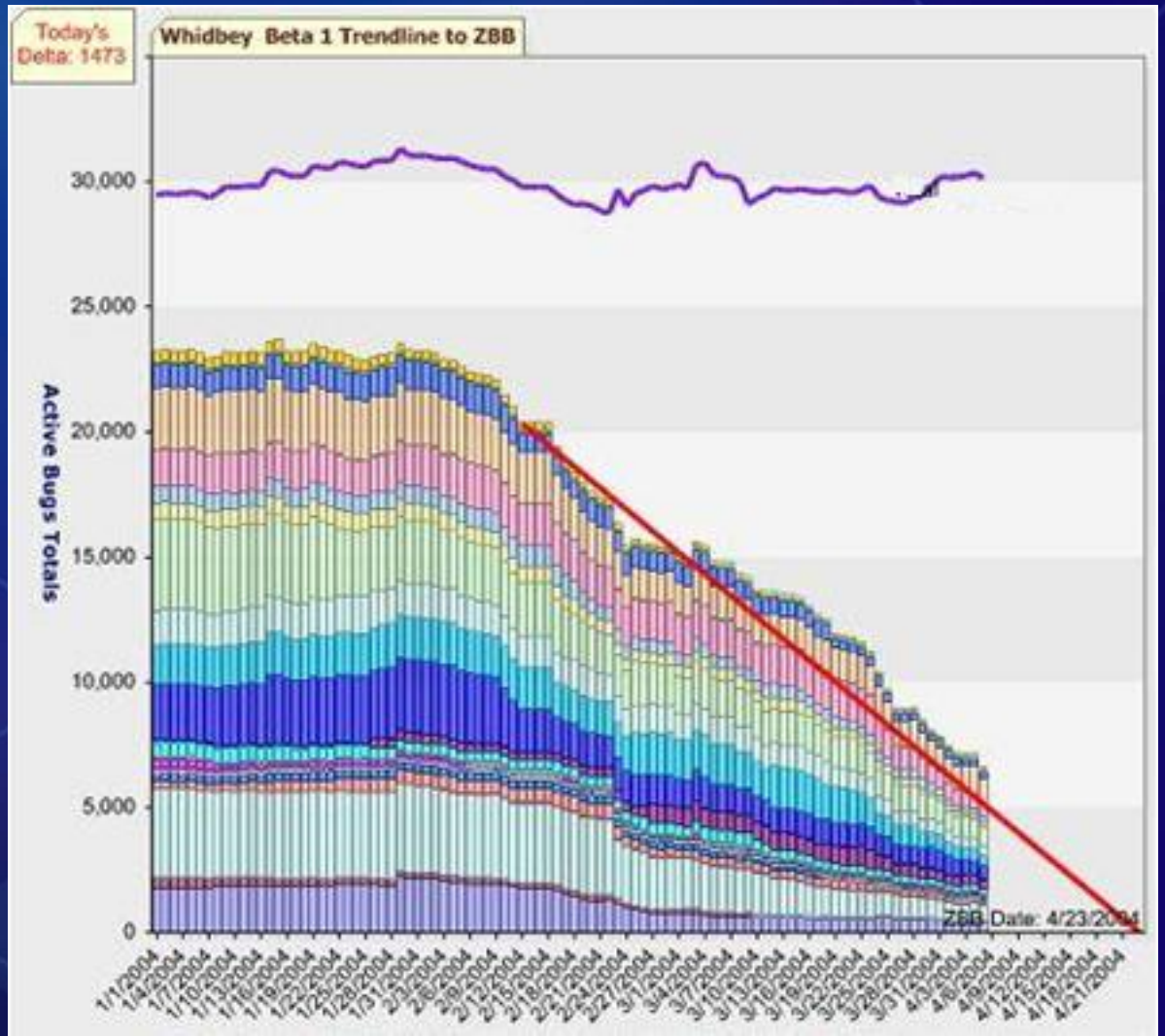
- Security Plan
- Static Code Analysis
- Code Coverage
- No Performance Regressions
- Localization Testing
- API Reviews
- All Bugs Fixed

VSTS 2010: Quality Gates



VS 2005 Debt

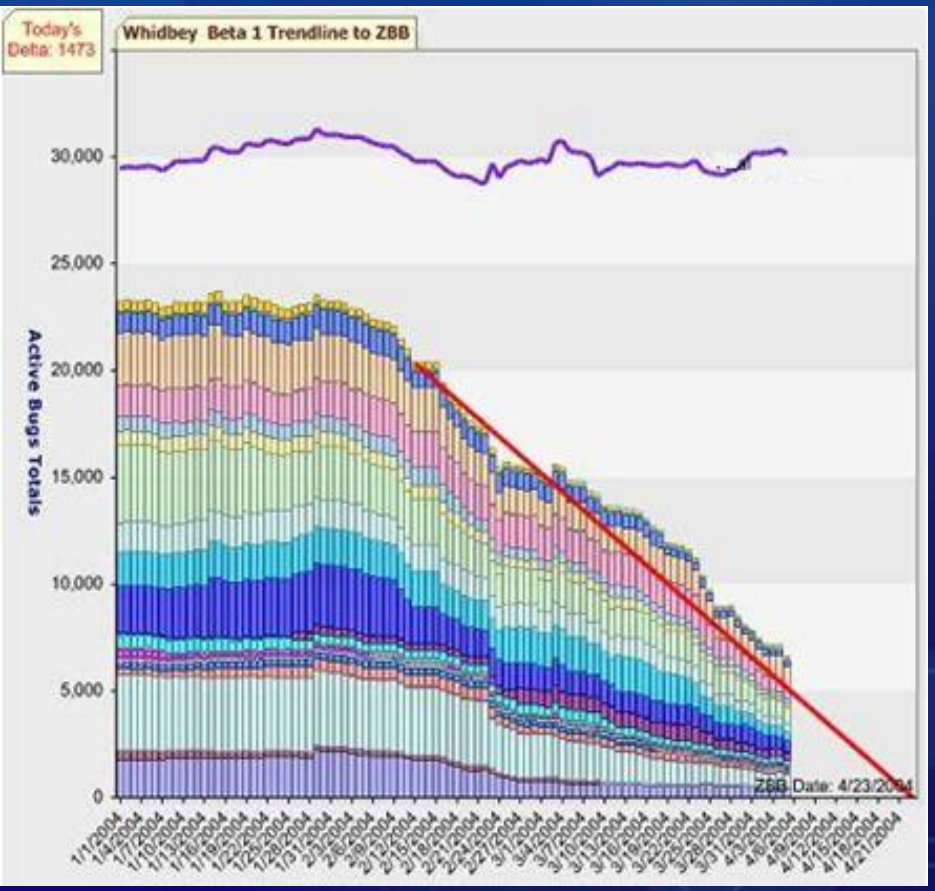
- VS 2005 Bug Stepdown at Beta 1



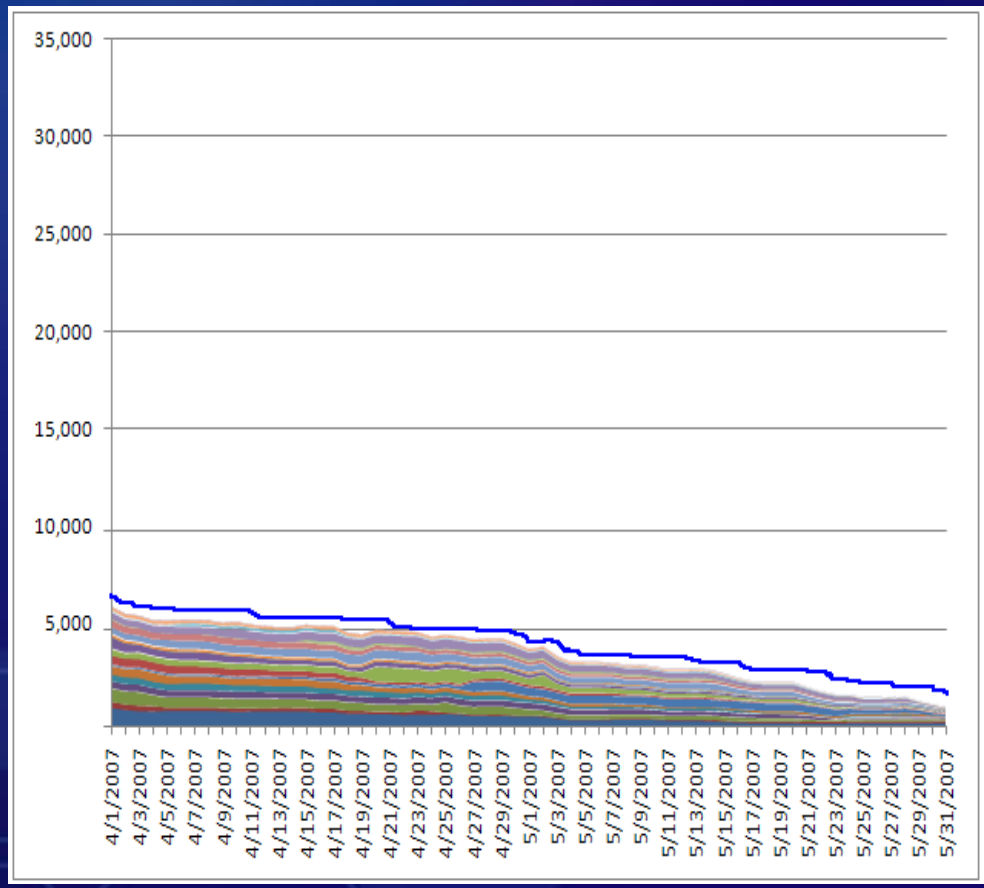
Did it Work…??

2005 Debt vs. 2008 Debt

VS 2005 Beta 1
Product Bugs only

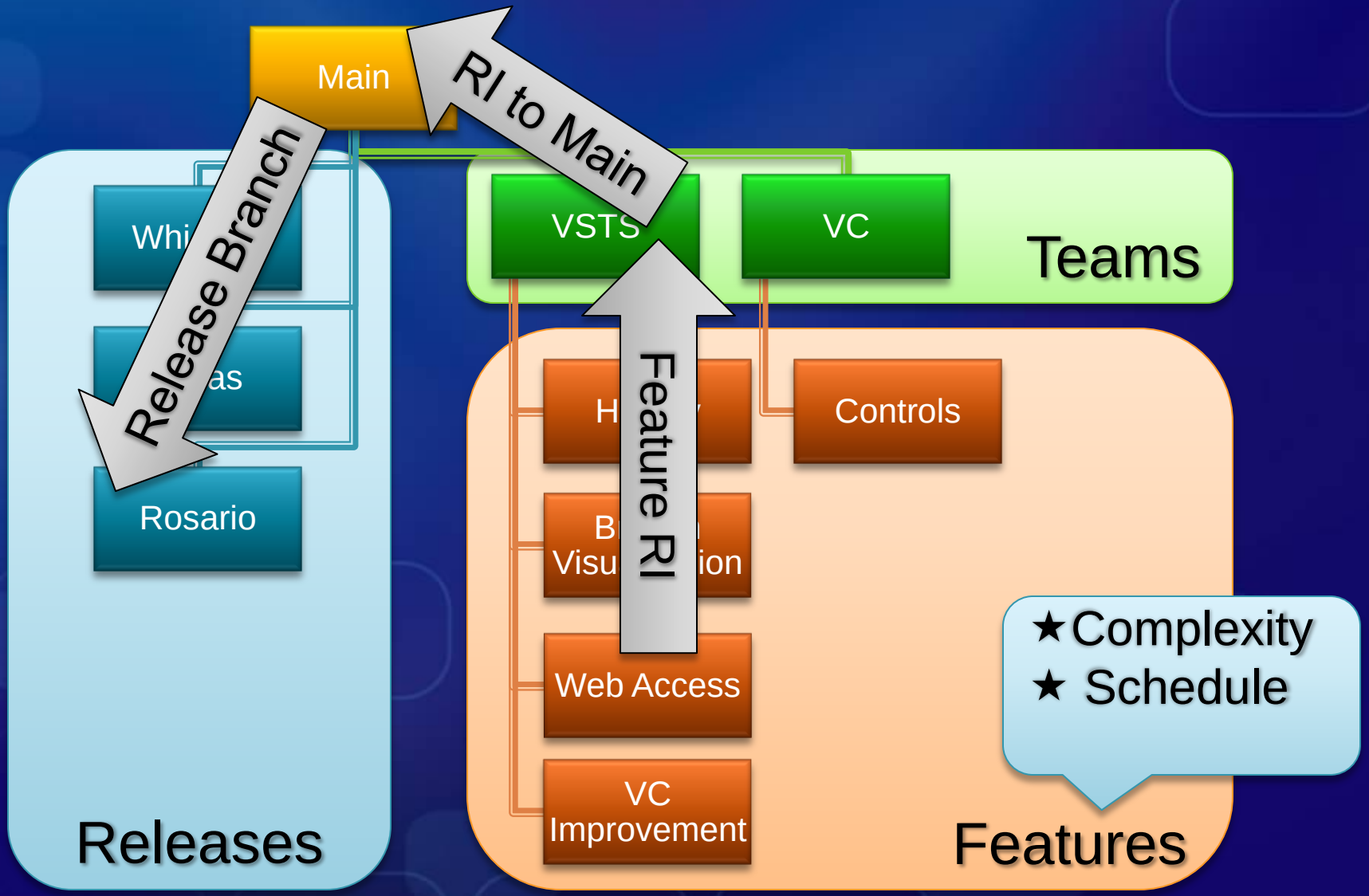


VS 2008 Beta 1
ALL bug debt



Branch Strategy?

VS Branching Structure



Drive Quality : Testing

- Gated Check-in
  (Full build + Automated tests)
- Integration Testing = Validate Dependencies
- Feature Testing = Validate new feature code
  (Cont. Integration)
- Check-in Tests

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Tracking and Reporting?

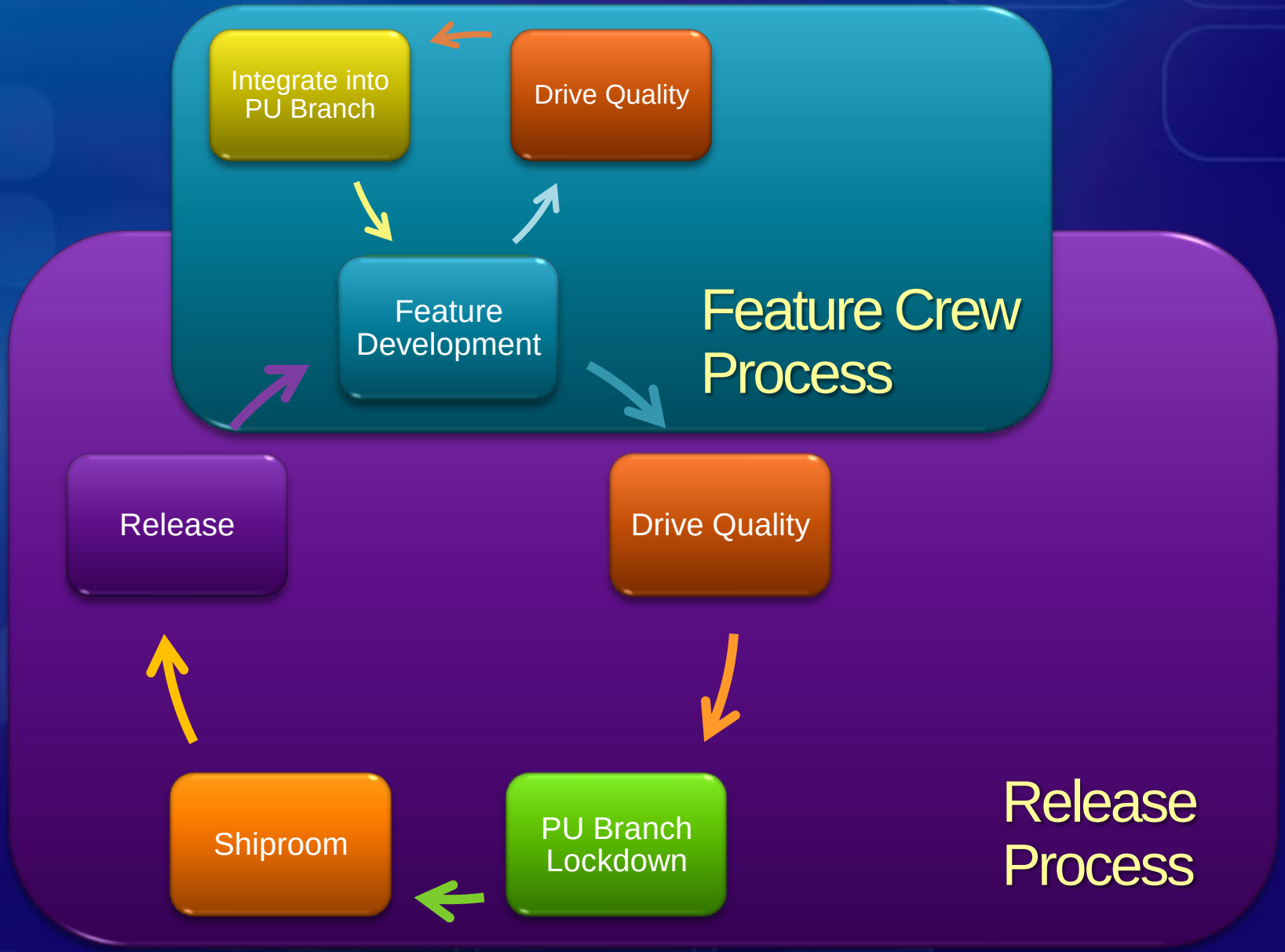
VSTS Tracking

Release Schedule

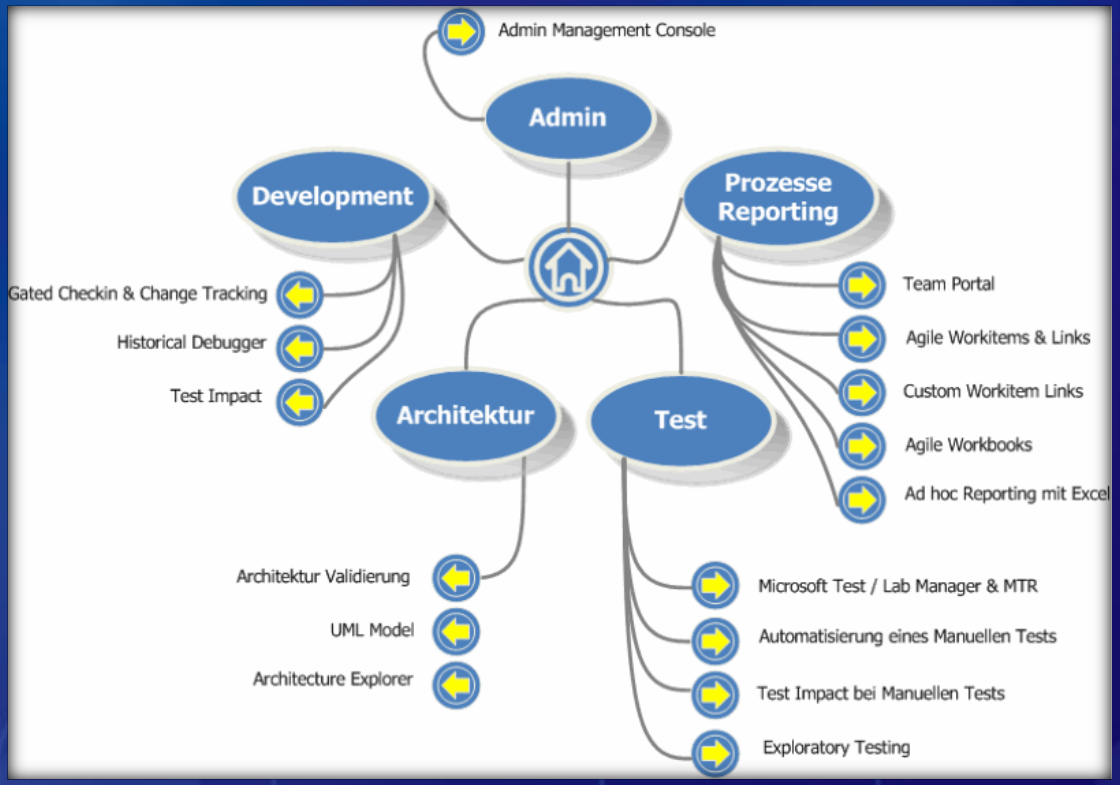
- High Level Schedule for VSTS
- Iteration Reviews held after each iteration
- Multiple efforts to drive quality

Phase	Start	End	Duration
Iteration 2	dd-mm-yy	dd-mm-yy	6
CTP	dd-mm-yy	dd-mm-yy	2
Iteration 3	dd-mm-yy	dd-mm-yy	6
Iteration 4	dd-mm-yy	dd-mm-yy	8
CTP	dd-mm-yy	dd-mm-yy	4
Iteration 5	dd-mm-yy	dd-mm-yy	6
Iteration 6	dd-mm-yy	dd-mm-yy	6
Test pass	dd-mm-yy	dd-mm-yy	3
Bug fixing	dd-mm-yy	dd-mm-yy	3
Ask mode	dd-mm-yy	dd-mm-yy	3
Beta 1	dd-mm-yy	dd-mm-yy	2
Iteration 7 (DCRs)	dd-mm-yy	dd-mm-yy	6
Test pass	dd-mm-yy	dd-mm-yy	3
Bug fixing	dd-mm-yy	dd-mm-yy	3
Ask mode	dd-mm-yy	dd-mm-yy	3
Beta 2	dd-mm-yy	dd-mm-yy	2
Security push	dd-mm-yy	dd-mm-yy	2
Holiday	dd-mm-yy	dd-mm-yy	2
Ask mode	dd-mm-yy	dd-mm-yy	4
Escrow	dd-mm-yy	dd-mm-yy	2
Release	dd-mm-yy	dd-mm-yy	2

VSTS Release Process



VSTS 2010 Beta 1 Quickhits



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