
Collaborative Software Management

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P r e s e n t a t i o n

FK1

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Collaborative Software Management

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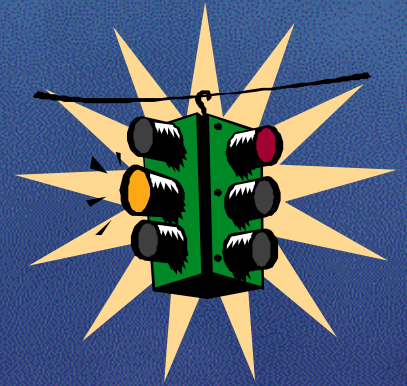
Web Swirl

- Swirl ... a whirling confusion of rapid and steady mix of business and software changes
- Speed, quality, and vision are the keys
- Winner takes all, no 2nd place

Outline

- Web age continuous delivery
- Leveraging technologies
- Business Intelligence
- Management Metrics
- McCabe metrics
- Testing

The Requests Swirl



Adds
News
Links
New interface
Reengineering
Audio XML C to Java
Data interface
E-commerce Base
business rules

Speed

- To market
- To new technology
- Of integration
- Of outsourcing
- To fix – of maintenance
- To competitive advantage

- Enablement with quality

The Projects Swirl

Adds
News
Links

New interface

Reengineering C to Java

Audio XML interface

Data Base

E-commerce business rules

The Products Swirl

Adds
News

Links

New interface

Reengineering

Audio XML C to Java

Data interface

E-commerce Base

business rules

Process Swirl

- Different life cycles – pick the one that fits
 - Development and maintenance LC's
- Groupware assisted
- Defined yet collaborative
- All records are cross referencable
- All held and invoked in a Process Manager
- All in one portal

Map the change



Fit the life cycle



Size the tools

Request Manager

- make requests
- evaluate versus business priority
- assign the work to a queue

implement in a
lifecycle of hours

Product Manager

implement in a
lifecycle of days

Project and Product Manager

implement in a
lifecycle of months

Process Manager & Collaborator

add process and collaboration as complexity and risk rises

Other Concurrent Swirls

Integration
Degradation
Delivery
Fixing errors
Testing
Technology
Dispersed team
Dispersed tools



Old Project management

- Every project a new start
- Different tools – non interfaced
- Project management by command and control
- Project management and software tools don't talk
- Standards have no consistent application
- Didn't include software management



Enabling Technology

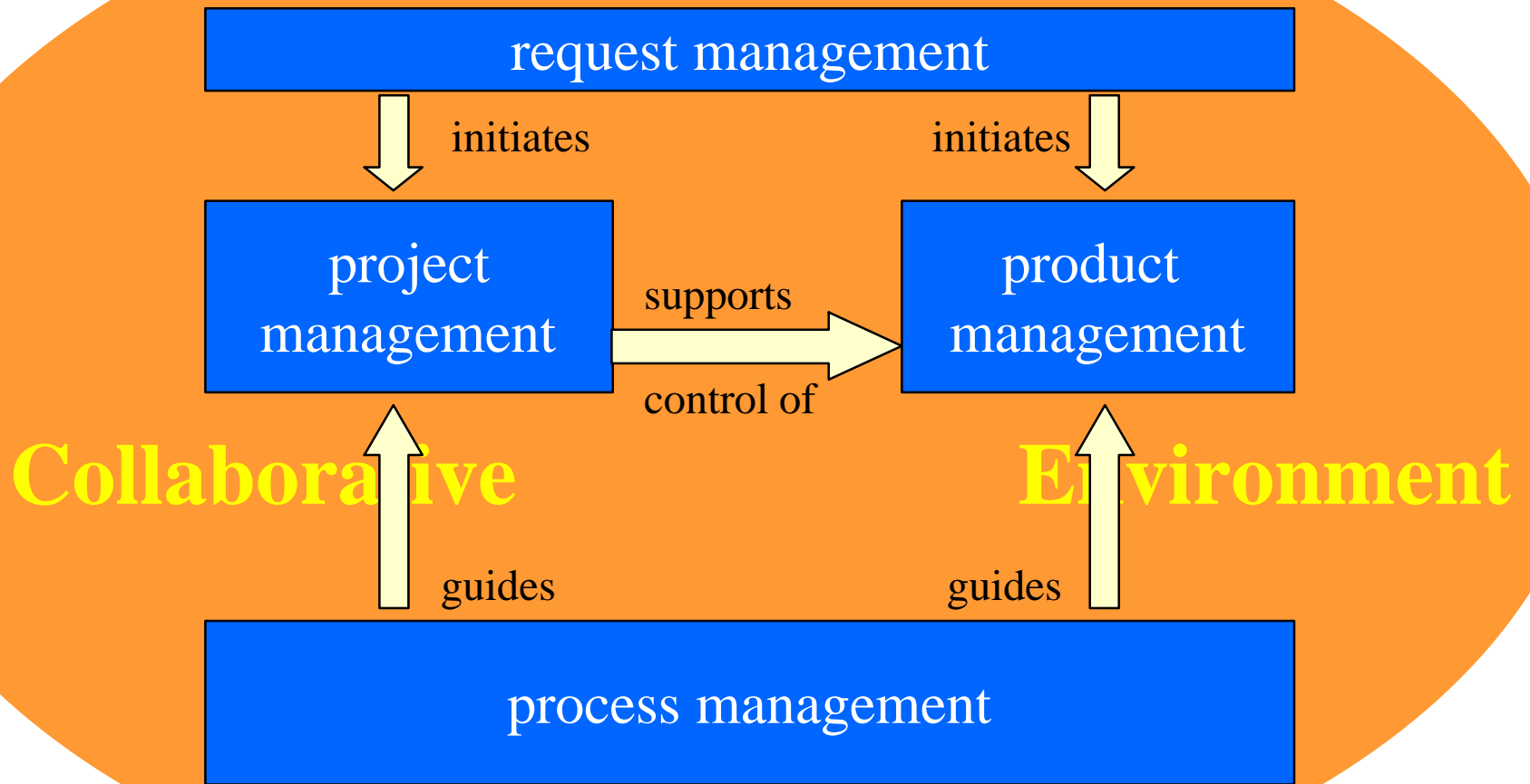
- Groupware
- Every document is a record in a relational data base
- Outlining
- Portal

Brave New World

- Collaborative vs. authoritarian
- Not by command and control
- Everybody see's it
- Shared publicly – across companies and organizations
- One firewall, one style, one place
- Continuity from project to project
- Emphasis on speed and simplicity
- Uniformity of standards and metrics



suggested modular architecture



collaborative environment

workflow

document management

discussion databases

Outlining documents

integration with calendars / schedules

index of projects, processes, products, systems, etc.

web, e-mail integration

publication, reporting, metrics

every document is a part of a relational database

etc.

request management

request/issue
management

capture and
track requests

manage work
queue

manage/deal
with requests
through
workflow

escalate requests
to;
-requirements
enhancements
-defects, etc.

product management

define / manage requirements and changes
create and run tests
manage reviews and defects
measure all progress

general project phases					
general project deliverables	specify	build	test	evaluate	measure
	requirements	code control capability	test plans	reviews	metrics -standard -defined
	design objects	software building tools	test objectives	inspections	
	build/release -plans -reports		test scripts procedures use cases	defects -pre ship -post ship	
	enhancements		test runs	test reports	

Project Management

define, plan and track projects
manage project deliverables

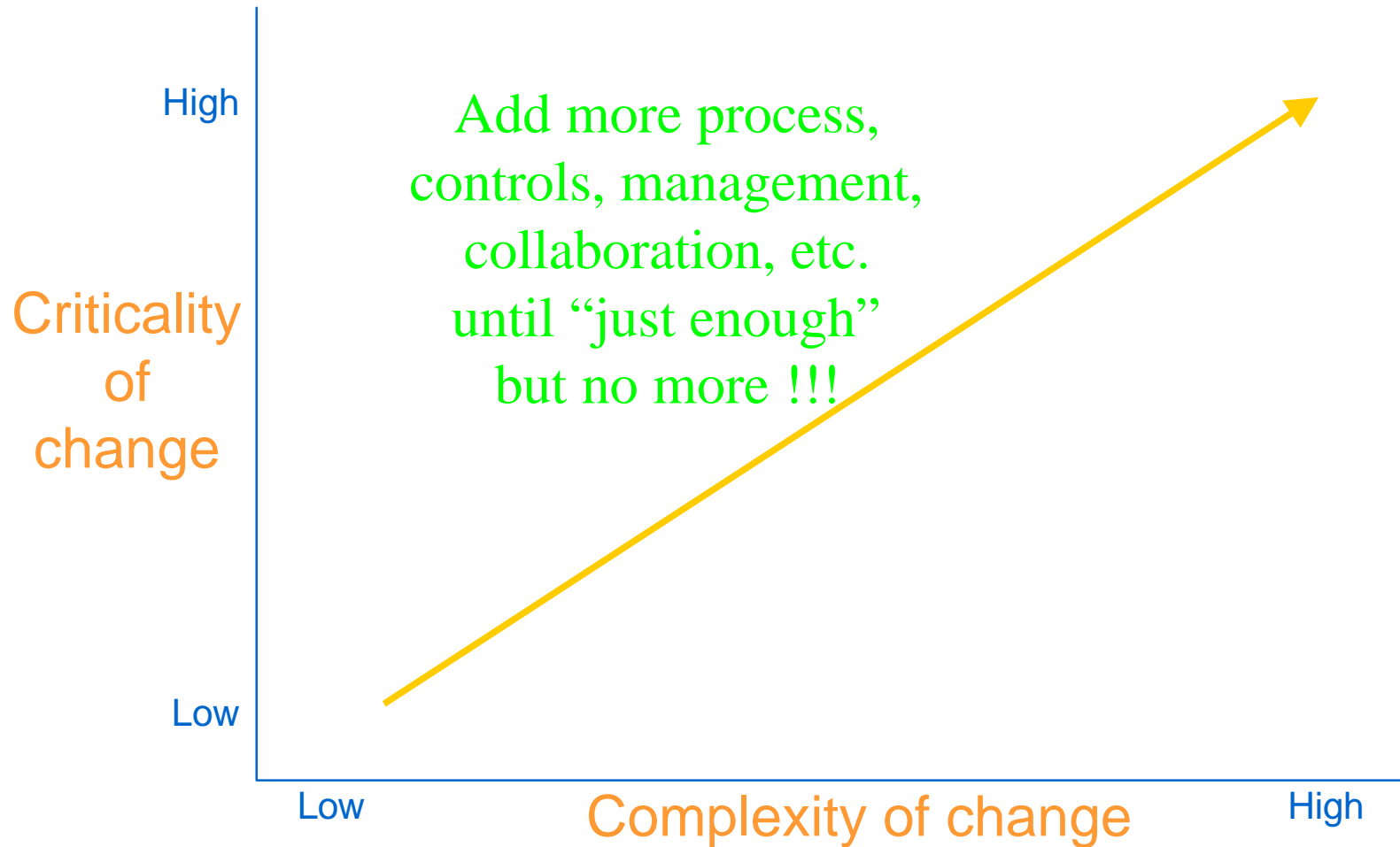
general project phases			
general project deliverables	project definition	project planning	project tracking
	-project statements -goals -scope -business case (go/no go) -roles/groups	-project plans -phases / tasks -commitments -critical resources - estimates	-reports -evaluations -meetings -metrics -issues -risks
-manage project deliverables create projects from external sources -integrate with ms project scheduling tool			

Process Management

define, maintain process assets
relate processes to standards
manage process deliverables
change and improve processes
manage people skills, training

standards	policy	process	procedure/ guideline	template	lifecycle, phases, tasks
-SEI-CMM (SW, SA, people, cmmi) -ISO 9000 -SPMN 16 Point Plan -PMBOK -IEEE	-forms -examples -document control -workflow (review & approval) -change requests -links to standard(s) coverage for analysis				

Software Management - “Just Enough”



Sample Metrics- View and Count by:

- Errors
 - By product
 - By phase
 - By cause
 - By severity
- Requirements
 - By Tests
 - By run
 - By pass
 - By fail

Relationship to McCabe Metrics

- Prior --McCabe and Assoc. --- the code
- Now – the management

Business Intelligence Swirl

- The web front door of our business
- What are the customers requesting
- Affinity analysis
- The operational profile as BI
- Predicting the order pipeline from:
 - Requests management –relational cross referencing
 - Modeling the click history of orders



The Testing Swirl

- Catastrophe testing
- Security testing
- Integration testing
- Operational profiling
- Load testing
- Acceptance testing
- Regression testing

Testing - Lifecycle Months - the Lifecycle / Process

- Project Plan
- Requirements
- Issues
- Build / Release Plans
- Designs
- Enhancements
- Test Plans
- Test Procedures
- Defect Reports
- Test Reports / Metrics



all in one database

References

- Aimware www.aimware.com
- eProject www.eproject.com
- Inovie Software www.inovie.com

- Primavera Systems www.primavera.com
- WebProject www.wproj.com
- Netmosphere www.netmosphere.com

Development and Testing Lifecycles for E-commerce

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Closing Keynote

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