IBM

Software Development Governor:
Automating Governance in Software Development Environments

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What are our working procedures?

Why are we measuring function points?

Who's responsible for what?

When should I use which practice?

What worked well for other projects?

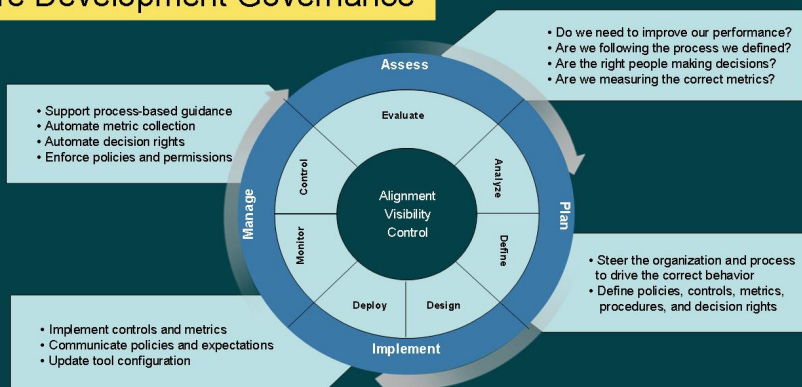How do I increase transparency in decision making?

Software Development Governance

What is software development governance?

The process of establishing communication and decision right structures, policies, controls, and measurements to ensure the success of development organizations

How tools can help?

Manage the governance lifecycle, specify and enact policies, automate metric collection, assess the effectiveness of the governance

- Support process-based guidance
- Automate metric collection
- Automate decision rights
- Enforce policies and permissions

- Do we need to improve our performance?
- Are we following the process we defined?
- Are the right people making decisions?
- Are we measuring the correct metrics?

- Steer the organization and process to drive the correct behavior
- Define policies, controls, metrics, procedures, and decision rights

- Implement controls and metrics
- Communicate policies and expectations
- Update tool configuration

Assess — Evaluate — Analyze — Define — Design — Deploy — Monitor — Control — Manage — Plan — Implement — Alignment Visibility Control

Artifact Centric Decision Rights Specification and Enactment

Specification Editor

Governor provides an editing environment to specify the software development artifacts, their states and transitions, key decisions that need to take place during the lifecycle of those artifacts, and the roles and responsibilities that should participate to ensure effective decision making.

Decision Rights

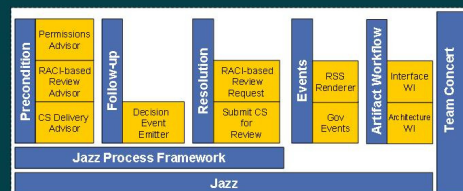**RACI** stands for **R**esponsible, **A**ccountable, **C**onsulted, **I**nformed participation relationship.

Decision/ task/ action	Joe (Developer)	Mike (tester)	* Developers	Project Manager
Mark build as stable	R	R	I	A
Approve/reject test plan	I (if test plan includes features Joe worked on)	I		AR
Create test plan		R		A
Estimate work item	AR		I	C (if new estimate > twice old estimate)

Enactment in RTC

Deploying the governance specification in RTC configures the following enactment mechanisms
- Artifact workflow states and transitions
- Permissions for user actions and artifact state change
- Control artifact lifecycle based on RACI spec
- Automatically invite reviewers based on RACI policy
- RSS based notification of decision outcome

RTC Enactment Architecture

Precondition: Permissions Advisor, RACI-based Review Advisor, CS Delivery Advisor
Follow-up: Decision Event Emitter
Resolution: RACI-based Review Request, Submit CS for Review
Events: RSS Renderer, Gov Events
Artifact Workflow: Interface WI, Architecture WI
Team Concert
Jazz Process Framework
Jazz

What is Governance for Your Team?

- How do you define success for your project?
- How do you manage your governance?
- Do you use tools to enact governance decisions?

Want to share your ideas, provide feedback or collaborate?

Contact us:
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