Telelogic

Effective Change Management For Requirements Using DOORS

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Agenda

* About Telelogic
* Why and What is Requirements Managements?
* What is the Change Management?
* Document-centered Formal CM Process
* Effective Change Management Using DOORS
* Change Proposal System supported by DOORS
* Conclusion
* Q&A

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Telelogic Facts

* Founded	1983
* US HQ	Irvine, California
* Public Company	Listed in 1999
* Revenue 2002	US $116.2 million
* DOORS Growth 2002	11%
* Employees	750+
* Customers	Over 100,000 DOORS users at over 1300 companies

Certificate Number FM38891

DOORS R&D & Support are certified ISO9001

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Warming-Up(1)

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Warming-Up(2)

Presented by Andy White and Toby DuPont

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Warming-Up(3)

* 요구사항이란 시스템으로부터 얻기를 바라는 것
* For example:
  – 당사자간 합의된 요구사항 :
    * 성주위에 호를 만듦
    * 3m deep
    * 4m wide
    * Filled with water
  – 만들어진 결과는?

Suddenly, a heated exchange took place between the King and the moat contractor, and hence, requirements management was born

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Why and What is Requirements Management?

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What is requirements management?

* Ultimately, requirements management is about customer satisfaction - about ensuring that we have built the *right* product.
  - Make sure we know what we *should* build (definition)
  - Make sure at every stage we do not stray from that intent (traceability)
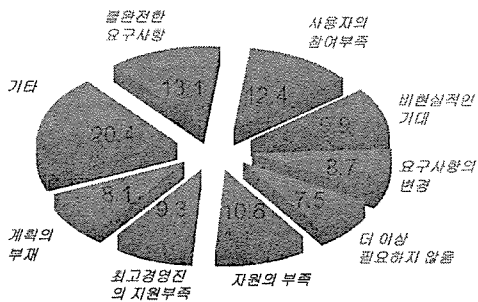 - Ensure at the end that we did build what we intended to (conformance)

Why Change Management for Requirements?

51.6%가 요구사항에 관련

불완전한 요구사항
사용자의 참여부족
기타
비현실적인 기대
요구사항의 변경
더 이상 필요하지 않음
계획의 부재
최고경영진의 지원부족
자원의 부족

Sources: Standish Group & Scientific American

The Domino Effect

* Incorrect requirements have a domino across the lifecycle
* Missing user requirements lead to missing system requirements, which lead to missing design elements, missing functions and failure

* *Approximately 60%-70% of IT project failures result from poor requirements gathering, analysis, and management.* (Meta Group, March 2003)

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What is the Change Management?

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Nothing endures but change.
(Heraclitus 540 BC ?480 BC)

All we can do is manage it efficiently.

What is the Change Management?

Change Management is a process for submitting,reviewing, and evaluating proposed changes for cost, schedule and technical impact so that informed decisions can be made concerning the cost/benefit of accepting proposed change.
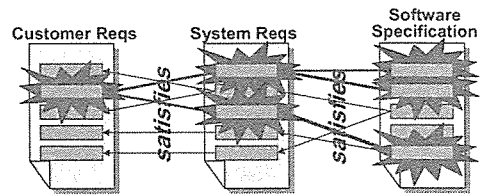
What is the Change in Requirements?

* Understand the impact of changes

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Roles for the Formal CM Process

* The Document Author/Owner
  - A document owner can coordinate multiple authors to help produce the document
* The CM Manager
  - is responsible for document control when the draft document is released for review and circulation outside the author's immediate peer group.
* The Customer
  - should participate in the formal review board and provide signature approval on the baseline document.
* The Developers
* The Testers

Document-centered Formal CM Process

* Create an initial draft document
* The author completes the draft and submits the document to the CM organization to distribute for review.
* The CM manager baselines the document and produces copies to distribute for review.
* Reviewers provide input by marking up their baseline copies and returning to CM along with any impact assessments.
  - The process may require a change request form summarizing the changes and sizing impacts to the reviewer's organization.
* CM hosts a review board where comments and impacts are assessed.
* Decision-making if change submittals should be accepted, placed on hold for further clarification or rejected.
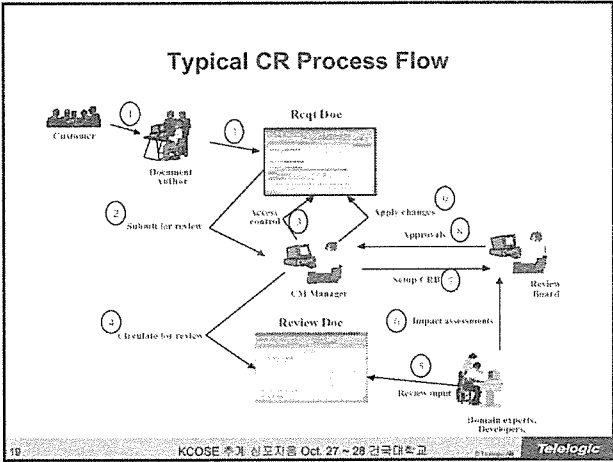
Document-centered Formal CM Process(Con't)

* Review Board minutes summarizing the activity for this review are generated and placed with the reviewed document.
* CM or the original author manually updates the document and a new version is declared.
* The incorporated changes are re-reviewed to assure they were properly executed and that nothing else was changed outside the approved changes.
* A new baseline is declared and the cycle repeats.

Typical CR Process Flow

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How DOORS Supports Change Management?

- Access Controls
- Baselining
- History
- Linking
- Change Proposal System (CPS)

History and Baselines

Change History

Previous Baseline

Current Version

Baseline Compare

243 differences found

Provides a concise list of differences as a single report

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What is the Change Proposal System?

* It provides the ability to submit, review, and apply change proposals on objects in formal modules.

* Capabilities
  - Propose changes to objects(including selected attributes) in a module under review.
  - Submit general suggestions for improvement to the review module as a whole.
  - Check the review status of proposals and suggestions that you have submitted.
  - Approve or reject any proposal
  - Link together proposals which have been approved, to the original object in a review module.

DOORS Change Proposal System Roles

* CP Manager
  - The CP Managers control what data is configured for review, and who can review it. They control which users have which CP roles.
* Standard
  - These are the ordinary users taking part in the review. They can submit proposals, and they can see the proposals submitted by themselves and by other users.
* CP Reviewer
  - The CP Reviewers are the members of the CP review team (sometimes called the Change Control Board, or CCB). They look at each proposal and decide on the appropriate course of action. They decide whether to accept, reject, or defer the proposal.

Change Proposal System (CPS)

Let DOORS manage change for you
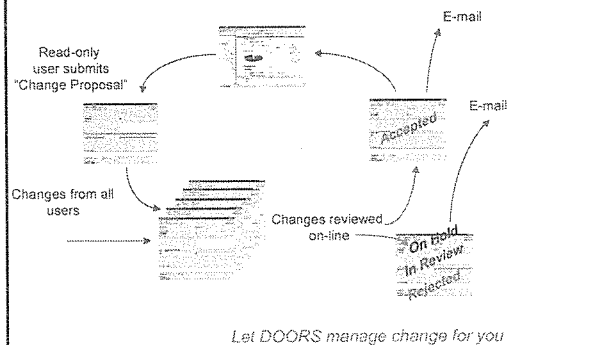
Submit Change Proposal

CPS users can:
* Enter proposed change for selected attributes
* Enter reason for change
* Enter change type
* Enter priority
* Submit

Review Change Proposal

CPS can be set to notify users when the status of their proposals changes
  - Reviewers may set status to: In Review; Approved; On Hold; or Rejected
  - Status is set to Applied after the Apply Change Proposals is run

변경요청서를 적용한 예(1)

변경요청서를 적용한 예(2)

Conclusions

* The Importance of Requirements Management
  - The Key to Project Success
* The Importance of Change Management for Requirements
* Typical CR Process(Unfreezing, Changing and Refreezing)
* How to Support CR Process in DOORS
  - Baselining
  - History
  - CPS
* DOORS supports an effective change management for requirements.

Nothing endures but change.

Enjoy it!

Any questions?