E-Quality

ACCU 2002

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solutions in time
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Objects in Action

The Project

- **Goal:**
  - mission critical banking application
  - 50.000 simultaneous users
  - low bandwidth
- **More than 100 software developers**
- **First approach failed after some years**
- **Thus, not much time and trust for new approach**
  - 3 months for architecture and „referential implementation“

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Force Transparency

- **Communication and Transparency for**
  - developers
  - QA
  - controlling / revision
  - customers
- **Practices and Values:**
  - shared ownership
  - shared knowledge
  - shared skill
  - no head monopolies
  - honesty
- **Introduction of a Wiki-Web**
  - twiki.org

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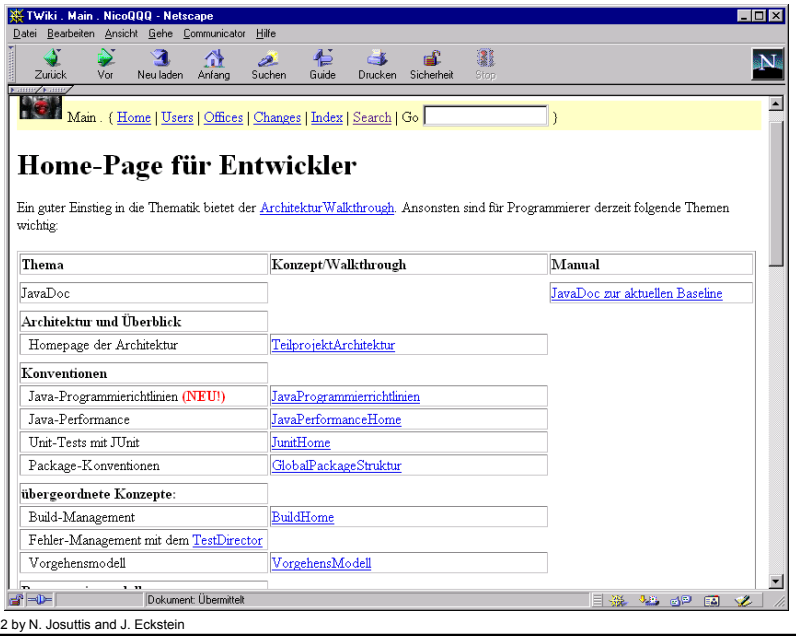

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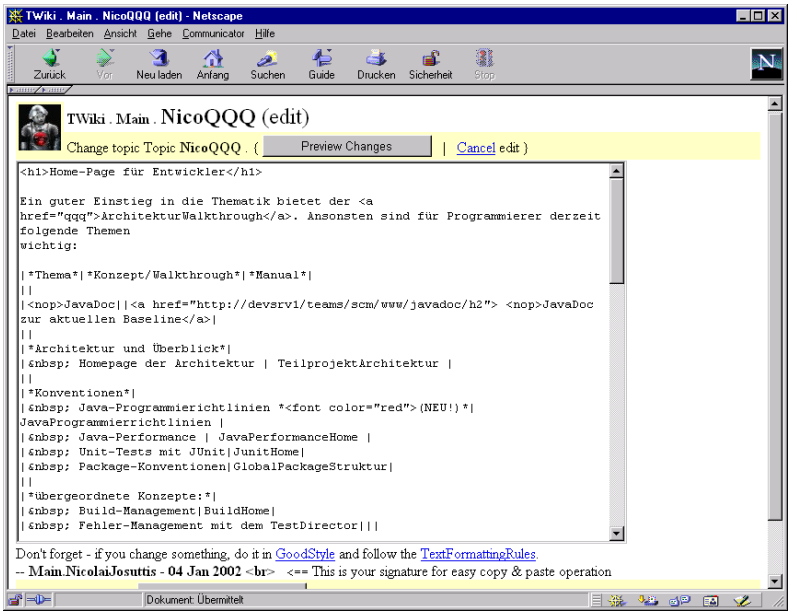

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Force Fun

- **Regeneration**
  - force vacation
  - avoid overtime
- **Satisfaction**
  - results
  - customer feedback
- **Contests**

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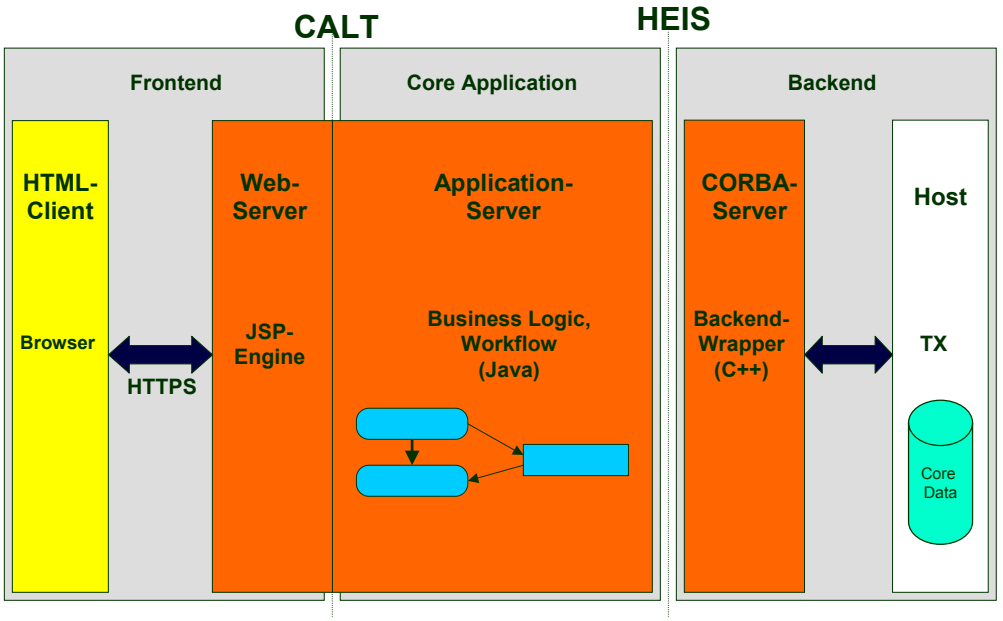

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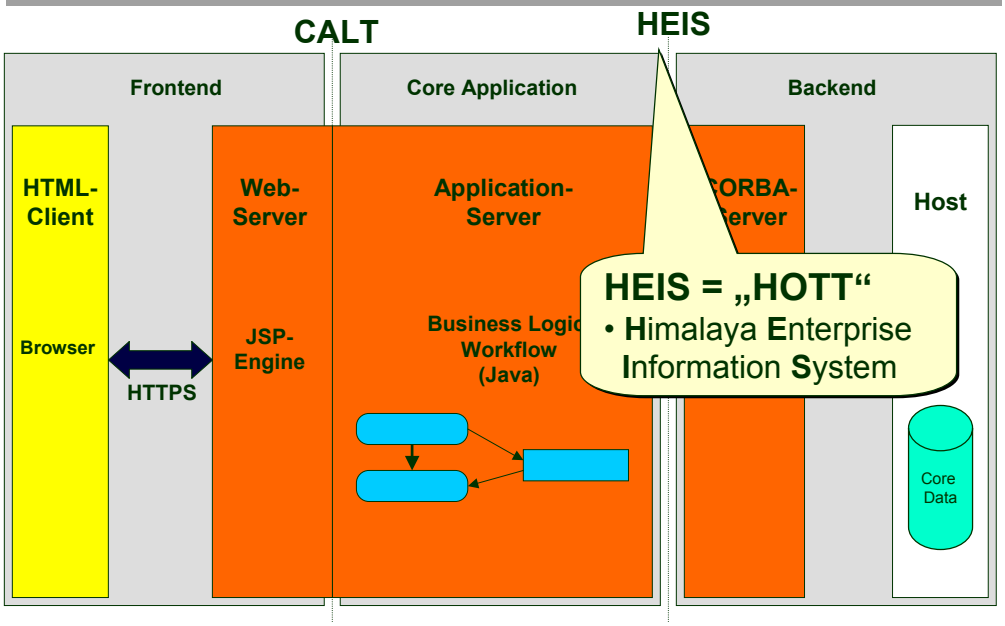

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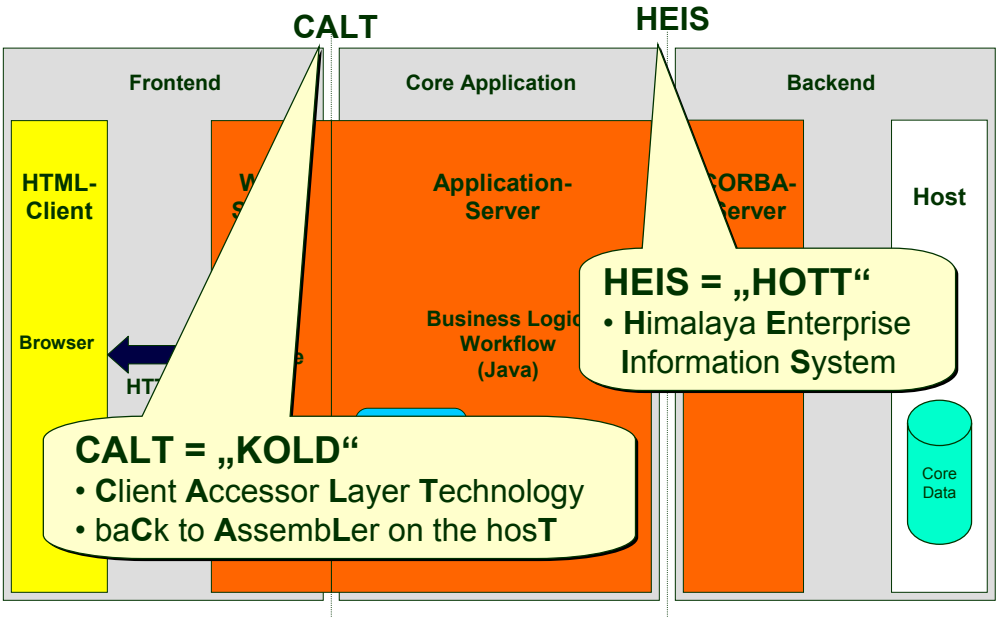

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Force Simplicity

- **KISS**
  - ***„I built a lot of large systems, but I never built a complex system“***
    [Kerth, Meszaros, Doble]
  - ***„Start stupid and evolve“***
    [Kent Beck]
- **because simple systems**
  - are better maintainable
  - don‘t require smart programmers

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Force Discipline

- **Guidelines**
  - good practices (essence of experience)
  - „no code without test code“
- **Deprecated interfaces**
  - and getting rid of them
- **Reviews and Code Inspection**
  - external
  - internal (by developers and scripts)
  - active marketing of concepts and interfaces
- **Timeboxing**

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Testing

- **Unit-Tests**
  - there should/must be more test code than code
  - for each individual class, component, module, ...
- **JUnit**
  - junit.org
- **Note:**
  - Special support for tests necessary
    - dummy contexts
  - GUI tests are more difficult
  - Separation of presentation and core application supports easy tests of business logic

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Timebox

Fixed short period for an internal release cycle

- **three weeks**
- **at the end:**
  - result (success or reasons for failure)
  - no overtime
  - retrospective
- **starts with planning session of teams**
  - according to functionality and business value
- **each week:**
  - integration and feedback

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Force Courage

- **Errors are Part of the Process**
- **"*Do It Right the First Time*" sends the wrong message**
  - we can't be uncertain
  - we can't experiment
  - we can't learn from mistakes
  - we can't deviate from plan

  ⇒ ***"Don't worry about getting it right the first time, get it right the last time."***
- **Change people and roles**
  - many projects fail due to people in wrong positions
- **Honesty**
  - bad news are good news

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Force Communication

- **E-Mail and Meetings**
- **Plenary assembly and info meetings**
- **Parties and Food**
- **Wiki-Web**
- **„Floating desks“**
- **Avoid Bottlenecks**

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Avoid Bottlenecks

- **Avoid technical bottlenecks**
  - avoid global resources
  - avoid singletons
  - avoid strong typing
- **Avoid communication bottlenecks**
  - modules/components instead of one BOM (business object model)
  - stable interfaces
    - clear roles
  - pragmatic instead of bureaucratic
- **Note: Project and team size influence architecture**

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Therefore...

- **Quality for Success means:**
  - Transparency
  - Fun
  - Simplicity
  - Discipline
  - Courage
  - Communication

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Quality in the E-Business

"You can rant and rave all you want about software quality (or lack there of), but the marketing guys run the world and they want market share now...

period, end of discussion.

My job is to deliver on time on budget, with the 'appropriate' quality metrics."

[Telco Development Manager]

⇒ **There is no explicit time for quality anymore**

⇒ **Make quality an integrated element of the process**

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Many Thanks!

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