

Managing successful SOA Projects, a view behind the agile “science”

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Agenda

- Introduction
 - Challenges within organizations
 - Challenges during the project
 - Challenges with technology / products
 - Conclusion(s)
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- References & more

Introduction (I)

Are SOA projects different?

Yes, 4 differences that make SOA projects more *fun* than “traditional” EAI projects

“80% of all IT projects fail!”

... says the CIO magazine, true?

Introduction (II)

1. A ton of assumptions
such as “simpler”, “more maintainable”, ..
2. Usage of the latest&greatest technology
3. Often a shift of the mindset
Organization / Development Team
4. Developers from both worlds

Challenges within organizations

- Clear implementation strategy
 - Silo organization vs. strong matrix
- Governance
 - Clear decision structures
 - Who signs off for a Change Request (CR)
 - Who is allowed to request a feature / version
 - Management of change
 - Process A might require version 1 & 2 of a service

Challenges within org's (II)

- Operation
 - Who takes care about what?
 - SOA is often distributed, therefore services are owned/operated by different groups
 - Responsibility & accountability
- Development
 - Centralized repository of services (Registry)

Challenges during the project

- One designated “architect”
... and just one ...
- Change process of interfaces
 - Interfaces are the key to success during implementation
- Design Patterns
 - SOA is not Object Oriented (OO)

Challenges during the project (II)

- Not everything is a webservice, even in a Service Oriented World
 - Performance (native protocol vs. SOAP)
 - Serialization (cost & list vs. Array)
 - Scalability (more users = more hardware)
 - Interoperability (WS-I)



Challenges during the project (III)

- Reinventing the wheel
 - Orchestration engines, policy servers
- Waterfall vs. agile Development
 - Customer focus
 - Instant validation of architecture
 - Discover problems before integration tests
 - Many iterations, instead of one large circle

Challenges with products

- Everyone must have an ESB
 - What is an ESB?
Each vendor has different message ...
- SOA to the edge - because everyone else does
 - Hype - latest and greatest technology
 - Critical issues are often forgotten (security, knowledge..)

Challenges with technology (II)

- Discovering and designing services
 - Business view vs. technology driven
 - Granularity (Tiny vs. Godfather)
 - Common services are the hardest!
- Software supposed to make it simple(r)
 - But does not prevent from fatal mistakes!
- Missing experience



Conclusion(s)

- Iterative development is key
- The right skills
 - People from both worlds
 - Continuous investment into education
- Strong backing from management
 - Especially if it's the first project
- Legacy developers **must** have their place in a SOA project and beyond

Conclusion(s)

- A methodology, what to do when, there is no “better”
 - Rational Unified Process (RUP)
 - Oracle’s SOA Development Method (OSOA)
 - ..
- **BUT** from these use what you need / and do not religiously follow them (1000 templates)
- Stick to standards (!= using everyone!)



References & more

- Joe Marasco - The Software Development Edge
- Martin Fowler - Enterprise Integration Patterns
- otn.oracle.com/soa
- www.ibm.com/software/awdtools/rup/



Questions & Answers

