

5th International Workshop on Adoption-Centric Software Engineering (ACSE 2009)

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Theme: Software Engineering

ACSE 2009 Theme: Migrating to SOA – Case Studies

Introduction and Motivation

Service Oriented Architecture (SOA) is a way of designing, developing, deploying and managing enterprise systems where business needs and technical solutions are closely aligned. SOA offers a number of potential benefits, such as cost-efficiency and agility. However, adopting SOA has considerable challenges. Issues such a security in a SOA-context, testing services in a federated environment and leveraging legacy assets when migrating to a SOA-based system, all remain important, unresolved concerns.

One way to foster the adoption of SOA is to learn from the experience of others. Case studies are often used in business schools as a means of illustrating key concepts and summarizing lessons learned. Even when the case study reports on an unsuccessful project, there are valuable insights that can be used to improve the state of the practice for the community as a whole.

This workshop focused on case studies in migrating to SOA-based environments. Industry professionals and academic researchers presented the case studies from business, engineering and operational perspectives. The ACSE 2009 workshop was the fifth in a series of events exploring the transition of new tools and technique from research to practice (and vice-versa). The first ACSE workshop was held at CASCON in 2001.

Reasons for Participation at CASCON 2009

There have been several other conferences and workshops related to SOA (i.e., the “IEEE International Conference on Web Services” the “IEEE Congress on Services” and the ACM “International Conference on Service Oriented Computing”). However, none of the events focused exclusively on case studies in migrating to SOA. While this is a narrow topic, it is a very important one; thus, deserving of its own forum for discussion. Furthermore, this workshop discussed SOA from three perspectives, not often addressed - business, engineering, and operational - in a holistic manner. Since SOA is such an important new development, it’s important to learn how to successfully migrate to a SOA-based environment.

Workshop Structure

ACSE 2009 was a half-day event. The workshop had a mix of invited presentations and interactive discussions. Each invited presentation presented a single case in migrating to SOA. Following the presentation, all workshop participants discussed some of the lessons learned from the case study. At the conclusion of the symposium, the workshop chairs summarized key themes that were common across the case studies. Business, technical, and operational perspectives were all addressed. The idea was to foster the exchange of ideas and information in an informal setting, but with some boundaries placed on topics and time to ensure that the workshop stayed on schedule.

The workshop provided an opportunity for the exchange of information related to areas, including, but not limited to:

- Keys to success in migrating legacy systems to SOA-based environments

- Lessons learned from failed or canceled SOA migration projects
- Managing business, technical, and operational issues during SOA migration
- The role of tools in analyzing existing systems when preparing the migration
- Changes in engineering processes needed to facilitate SOA migration

Participants

The people who participated in the workshop came from a mix of academic, government and industry backgrounds. The academic participants brought a deep understanding of the underlying issues related to legacy system evolution (from a technical perspective) and return on investment issues (from a business perspective). Past experience with general migration strategies, and their applicability to SOA in particular, provided a sound basis for the discussion.

Participation from industrial representatives, particularly those in IT-oriented business consulting (i.e., IBM Global Services), greatly improved the workshop's tenor. Many companies offer their own specialized migration services; and thus, had valuable knowledge to impart as to what has worked and not worked in different contexts—and why.

There was no requirement for any participant to have been actively involved in a SOA migration project and no one was excluded from sitting in on parts of the workshop. The main requirement was an interest in SOA and a willingness to contribute to the discussion.