Power shift: The future of technology and what it means for the enterprise

Paul Daugherty
Chief Technology Architect
paul.r.daugherty@accenture.com
A lot happened in 2007

Market Caps
Apple $155B
IBM $137B
Intel $131B

Ready for $262 a barrel oil?

Two of the world’s most successful investors say oil will be in short supply in the coming months.
Consumer innovations are raising the bar for business - “gidy” ;) versus “ttswtts” [:(

1. **User experience**
   - Rigid
   - Complex
   - One Way
   - Intuitive
   - Flexible
   - Interactive

2. **Business process**
   - Detailed
   - Procedural
   - Intermediaries
   - Performance
   - Agile
   - Collaborative

3. **Middleware**
   - Point-to-Point
   - Proprietary
   - Technical
   - SOA
   - Inter-Operable
   - Communities

4. **Data**
   - Trailing
   - Transactional
   - Stove-Piped
   - Predictive
   - Interactive
   - Federated
A power shift from the technology to people
Yet, most organizations still struggle with the basics
High Performance IT Council
Survey of 500+ CIO’s

Top Drivers

- Legacy
- Errors
- M&A
- Growth
- Upfront issues

Source: Accenture High Performance IT Research
CIO’s First Priority:
Investors or Customers?
As a Result, Consumer & Customer Facing Systems have Suffered
Innovation allows High Performers to Increase The Gap

- **Percent of total CUSTOMER interactions that ARE online**: 31% more customer online transactions than average performers
  - High performers: 53%
  - Overall: 22%

- **Percent of total SUPPLIER interactions that ARE online**: 13% more supplier online transactions than average performers
  - High performers: 52%
  - Overall: 20%

- **Percent of total EMPLOYEE interactions that ARE online**: 18% more employee online transactions than average performers
  - High performers: 52%
  - Overall: 34%
Power Shift: 8 Defining Trends

Accenture Technology Vision

1. Cloud computing & SaaS
2. Systems Integration – Regular & Lite
3. Enterprise intelligence at scale
4. Continuous access to people and content
5. Social computing
6. Explosion of user-generated content
7. Gradual industrialization of SW development
8. Green computing
SOA is a Set of Standards that Increase Modularity and Make the Modules Easier to Use
Adoption of SOA: Accenture’s Four stage maturity model

Organizations typically move through four distinct phases

**Phase 1**
Organize and strategize
- Management buy-in and business needs.
- SOA readiness assessment
- Planning for SOA transformation

**Phase 2**
Initial Deployment
- First SOA projects.
- Convert applications to web services.
- Convert services to create business processes.

**Phase 3**
ESB- Based Solution and SOA Platform
- Emphasis on strategic and business services.
- Federation of services and in creating an ESB.
- Service oriented design and development using SOA tools.

**Phase 4**
SOA is industrialized
- Services - fabric of business operations.
- Cross enterprise processes.
- Federation.
- Utility and services infrastructure.
- Predictive IT.
- Business Insight.
- Near real time.

*Industry Is Stuck Here*
# The Fourth Wave . . . SOA

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<thead>
<tr>
<th>Wave</th>
<th>Drivers / Value</th>
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<tr>
<td><strong>Online Transaction Processing (1980s)</strong></td>
<td>• Need to automate repetitive business transactions within departments</td>
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<td><strong>Client/Server (1990s)</strong></td>
<td>• Business Process Re-engineering</td>
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<td>• Enterprise Resource Planning</td>
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<td>• Personal Productivity</td>
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<td><strong>Netcentric (2000)</strong></td>
<td>• Connect to the customer; customer self service</td>
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<td>• eCommerce</td>
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<td><strong>SOA (?)</strong></td>
<td>• Process-Centric Enterprise</td>
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<td></td>
<td>• Consumer-driven</td>
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<td>• “Agility”</td>
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Software as a Service (SaaS) offerings, based on SOA architectures, are disrupting Enterprise SW
SOA, Web2.0, and SaaS provide a new foundation for enterprise applications

My services are **defined** and **exposed** (*WSDL, REST*)

Communities use services and interact **generating value** (*Wikis, Blogs*)

My services are **usable** (*Ajax, Flash*)

Business on Web 2.0

**SAAS**

**Business Collaboration**

**User Interaction**

**Collaboration**

**Social Computing**

**RIA**

**Business Services**

**SOA**
Open Source is Changing the Dynamics in the Enterprise SW industry

- Open Source Communities
- For-profit companies
- Foundations, funded by traditional software companies

CRM Software
Office, Email, Mobile
Reporting & Business Intelligence
Content Management
Relational Databases
Framework & Tools
Infrastructure: Linux, Portals, Application Servers, Search Engines
New Approaches for Industrializing the Software Development Lifecycle

Model Driven Development
Domain Specific Languages
Agile Methods
SOA / SaaS

Degree of Abstraction

Business Requirements
System Requirements
Functional Design
Technical Design
Coding

Degree of Realization
Intent
Reality

Acceptance Testing
System Testing
Integration Testing
Unit Testing

V-Model of Software
Power Shift: Questions to consider

• Is your company a High Performer?
• Are you positioned for the shift to consumer-driven IT?
• What level of innovation is appropriate, and how do you accomplish it?
• How well does your Company understand its Business Processes?
• How do you take IT from a “Craft” to “Engineering”?
• Flexibility Matters - How dynamic is your Architecture?