



The Normandy Group



Case Study in SOA

Turning Strategy into Action

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Service Oriented Architecture



Hyper-Competition requires sustainable performance which demands new levels of integration and service levels



What is a Service Oriented Architecture?

- SOA is an architectural style whose goal is to achieve loose coupling between interacting software agents. For the most part, commonly known as web services.
- Services are self-contained and do not depend on the context or state of any other service. They work within a distributed systems architecture
- HTTP(S) is the transport.
- SOAP is the container (envelope).
- XML is the message.
- Stateless and stateful.

Definitions

Web Services

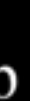
- Web services are a new way of connecting businesses. Web services are platform-neutral and vendor-independent functions that enable any form of distributed processing to be performed using XML and Web-based technologies.



Definitions

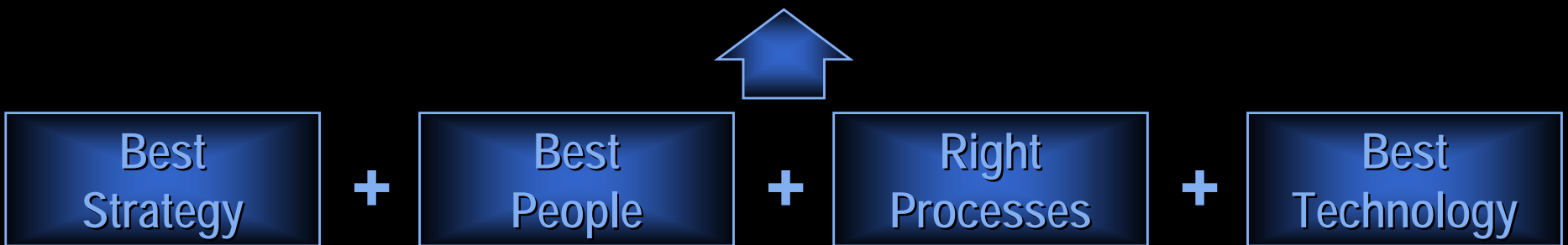
Our Perspective

- SOA at its core is message based communication, loosely coupled systems, and business process coordination. Web Services is the preferred implementation methodology for loosely coupled and interoperable systems. Serves as an abstract architectural model; it is an action or procedure between the business and the technology model.



Major Elements of SOA

- SOA is not just a loose set of standards
- SOA is a strategic business capability to:
- Capture and interpret important, leveragable information throughout the business life cycle
- Establish organizational structures and business processes that ensure customer responsive decision making and program execution
- Maximize cross-channel, cross-product synergies



Major Elements of SOA Approach

Analyze

Develop a deep understanding of customers and markets using analytical techniques, economic and business modeling

Strategize

Devise new ways to create value, and new approaches to connect with customers

Optimize

Consciously disseminate customer insights gained throughout the organization to maximize ROI

Client

Innovate

Create new processes and infrastructures to support customer-centric operations

Integrate

Services Oriented Architecture serves to connect the customer to our business seamlessly



SOA Value Proposition

- Addresses strategy issues from start to finish
- SOA is core to sustaining /enhancing our customer strategy
- Foundation for the optimum solution to meet the client's needs
- Solves problems by bringing to bear a full range of integrated expertise

Case study in printed product distribution

- Client is a large non-profit distributor of magazines, books, videos and DVDs.
- Tremendous web presence.
- 30% of order base is taken over 2 different web catalogs.
- Well maintained product content and product offerings in ECM package.
- Data pulled from ERP into web item listing.
- Data pushed direct to ERP nightly.

Why mess with a good thing?



... to drive greater sales to the top line...

- Expand sales channels to external partners and large chain stores.
- Recruit outside sales affiliates.

... and drive cost savings to the bottom.

- Minimize external development efforts for prospective affiliates.
- Minimize internal development efforts to support the initiative.
- Provide cost effective way to share data to both internal and external consumers.

Let's focus on outside sales
affiliations.



Objectives

- Build a new sales channel with external web book resellers
- Control the content.
- Ensure accuracy of multi-tiered pricing structures.
- Timeliness of inventory.
- Utilize existing ECM solution.
- Leverage server investment.
- Leverage customized code base that tied directly back to ERP system.
- Distribute common code base to satellite sites.

Issues with old methodologies (sneakernet).

- Duplicated data at every satellite site.
 - No continuity in content. Publisher wanted to ensure that products were represented according to their and the author's wishes
 - Another "moving part" to push and pull data to satellite sites.
- Stale pricing and availability.
- No centralized order entry procedure.
- No consolidation of business rules and logic.

Establish Direction and Buy In

- Establish a solid business case and present same to executive management. In this case, the decision was driven by management.
- Determine what functionality is to be exposed to the outside world.

Functions By Units of Work

- Define functionality in small units of work.
- Avoid tightly coupled services. This prevents intermingled dependencies and makes your code more efficient, scalable and reliable.
- Ensure security as you would any web based technology. DoS and spoofing will continue to be threats as this methodology gains traction. Publication in the UDDI?



Outcome

- New partners (sales affiliates) opening up.
- Large distributor channels are next to be established.
- Client satisfaction in solution.

What can SOA / Web Services be used for?

- Publishing interest rates
- Controlled content distribution
- Pricing for partners
- Live inventory
- Insurance actuaries in the field
- Real estate (MLS)
- Service scheduling
- Task completion
- Dynamic vehicle/truck routing
- Customer quotes
- Data cleansing

Only your imagination limits you.

Thank you for your time

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