SOA driven IT Modernization Strategy

As ABC CORP modernizes its XYZ application, it has to identify and pick the most appropriate application and data integration patterns while building the next software architecture. ABC CORP's goal is to shift from a monolithic application architecture into a 3-tier architecture while following Service Oriented Architecture (SOA) methodology and to retaining historical data for management information system. SOA provides the foundation for more flexible business process delivery and creates a sustainable IT delivery platform to support future business growth and industry technology changes.

This document provides a series of recommendations to aid in ABC CORP's shift from a monolithic application architecture to a distributed SOA.

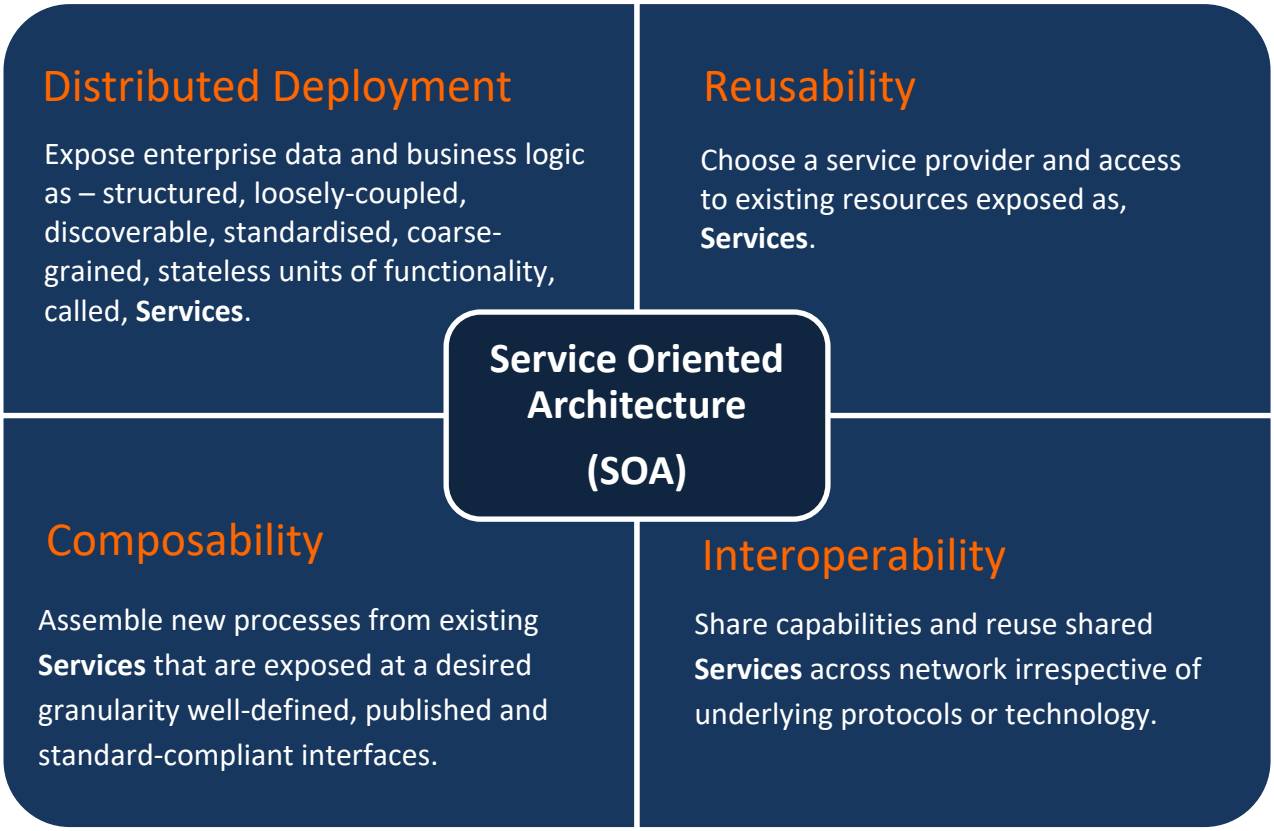
What is Service Oriented Architecture (SOA)

A set of ***components*** which can be invoked, and whose ***interface*** description can be published and discovered (Source: W3C).

Service-oriented architecture is a ***client/server*** design approach in which an application consists of software services and software service consumers (also known as clients or service requesters). SOA differs from the more general client/server model in its definitive emphasis on ***loose coupling*** between software ***components***, and in its use of separately standing ***interfaces*** (Source: Gartner).

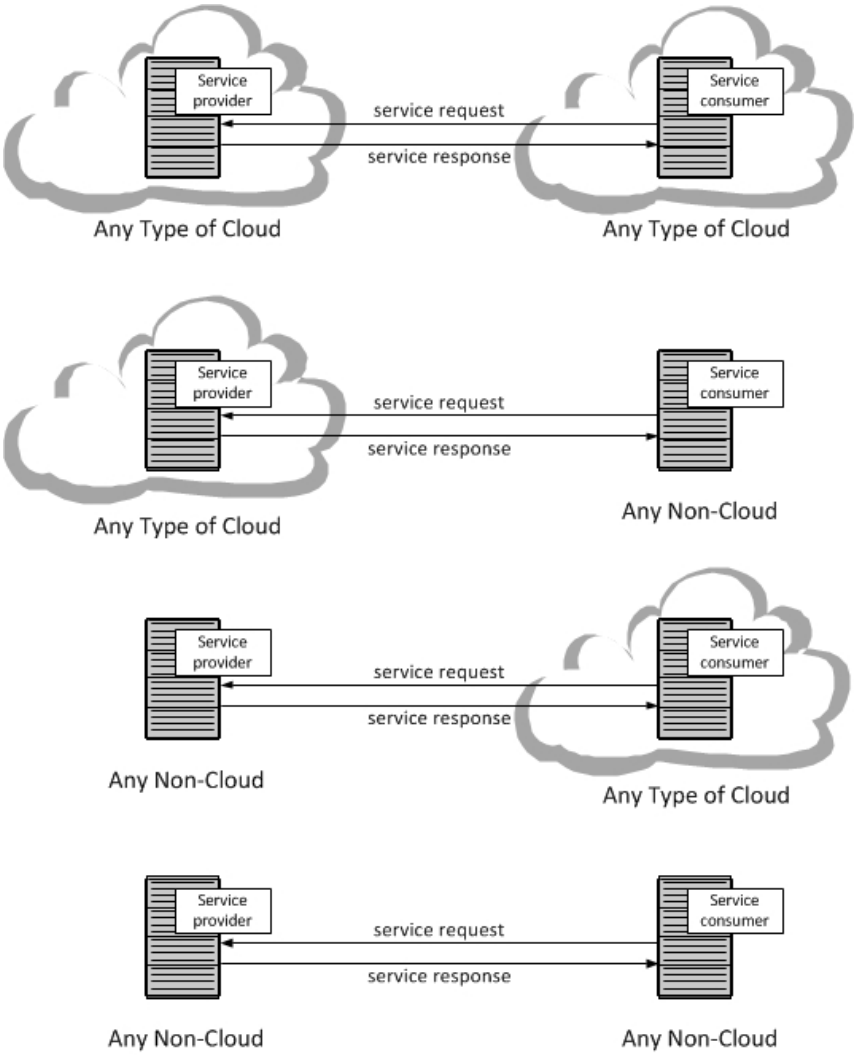
Service Oriented Atchitecture (**SOA**) is a methodology that allows to achieve:

- **Distributed Deployment**
- **Reusability**
- **Interoperability**
- **Composability**



SOA and Cloud Computing

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.



Overall Benefits of adopting SOA

ABC CORP's target-state Service Oriented Architecture provides the foundation for more flexible business process delivery and creates a sustainable IT delivery platform to support future business growth and industry technology changes.

- Reduce Database size by eliminating redundant data and introducing systems of record
- Shift investment to commodity, open source, and cloud HW/SW alternatives
- Develop the applications with lowest coupling of business logic to ensure quick wins
- Lower the defect / debugging rate by reusing existing services across apps
- Proactively identify and migrate assets with high end-of-life risk
- Establish Tolerance for Heterogeneous Technologies

Enables market competitive pricing…

- **Develops and maintains smaller chunks of functionality with less complexity**
- **Deploys less expensive hardware and software across distributed systems**
- **Lowers maintenance costs by not having to make changes across the entire code base**
- **Simplifies data integration through better tools and standards**

Reduces system complexity and risk…

- **Eliminates reliance on older, out-of-support hardware and software (e.g. Oracle Forms)**
- **Reduces business risk by preparing the business for rapidly evolving technology (e.g. Internet of Things)**
- **Reduces the probability of a catastrophic system event by separating functional systems**

Enables business agility and flexibility…

- **Fulfills new and enhanced business requirements more quickly (time to market)**
- **Improves application functionality and better matches target-state Project SEA business-processes**
- **Leverages existing services for true responsiveness**
- **Allows ABC CORP to integrate with external business services more easily**