New Approaches for Software Development: Potentials and Pitfalls

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This talk will discuss current approaches to software development and evolution that enable organizations to respond quickly to new business needs while maintaining their legacy applications. These approaches include:

1) Business process modeling, which takes a comprehensive view to understanding and representing functions across an enterprise. Because it takes a perspective that crosses an entire enterprise, it enables the breaking down of barriers that take place within individual organizations. These barriers are commonly called “stovepipes”.
2) Service oriented architecture (SOA) which is a way of designing, developing, deploying, and managing systems where coarse-grained services that represent reusable functionality and service consumers compose applications or systems using the functionality provided by these services through standard interfaces. This approach enables the flexible composition and evolution of new services.
3) Software as a Service (SaaS) in which a provider licenses an application to customers for use as a service on demand. This enables consumer organizations to have state of the practice software within the standard costs of hardware and software infrastructure .

The combination of these three approaches offers a new way of developing and maintaining software that can enable rapid responses to new business situations. This talk will contrast the new approaches with traditional software development and describe their potentials, as well as the risks.