

Paul Strassmann 2007-2008 Public Lecture: Monday, November 19, 2007
George Mason University Prince William County Campus*
Bull Run Hall, Room 130, 7:30PM.
Public Reception in the Bull Run Hall Atrium at 6:30PM

What is a Service Oriented Architecture?



The distinguishing characteristic of systems constructed over the past 60 years was their approach to supply each application with its unique databases, custom-made communications and handcrafted code. Although attempts were made since 1990 to simplify the architecture of such systems, they did not succeed. Enterprise systems attempted to streamline information systems through the construction of an all-encompassing database that would then feed all of the applications. Although such systems succeeded where the environment was relatively stable and predictable, the “enterprise solutions” failed because they could not accommodate rapidly changing circumstances. Most importantly, the “enterprise solutions” were focused on managing information assets within

the boundaries of a single firm while global commerce called for increased interoperability across multiple enterprises.

The Service Oriented Architecture (SOA) is an attempt to overcome former limitations by disaggregating databases, communications and applications into separate “services”. Under such an arrangement each of the major components of a corporate system is a stand-alone module constructed with interfaces that are subject to international standards. In SOA any component can call on services to be provided by any other component over a shared network. In the case of global commerce, the interconnectivity is managed via Internet using agreed protocols.

The objective of this lecture is to describe the current implementation of SOA solutions and to show the economic advantages of distributed computing. Since SOA is more vulnerable than previous solutions, safeguards against security compromises will be also discussed.

Professor Strassmann, former Acting Chief Information Officer (CIO) of the National Aeronautics and Space Administration (NASA); former Director of Defense Information, Office of the Secretary of Defense; and retired Vice President of the Xerox Corporation will present his second lecture of the 2007-2008 series. The Strassmann lectures are free and open to the public. Professor Strassmann’s previous lectures from his 2005-2006 and 2006-2007 series can be viewed and downloaded from <http://www.strassmann.com/>.

Distinguished Professor of Information Sciences Paul Strassmann has written numerous books and articles on information management including *The Business Value of Computers* (1990), *The Squandered Computer* (1997) and *Corporate Information Economics* (2007). Professor Strassmann is delivering four annual lectures on current issues in information management. His research and writing focuses on the growing scope and complexity of information-intensive organizations and the establishment of empowered CIOs. Professor Strassmann created the Information Value-Added and Information Productivity formulas behind the 2005, 2006 and 2007 Baseline Magazine 500 rankings of the companies that manage information best.

*Visitor parking information and campus maps can be found on the Mason Web Site (www.gmu.edu).