

MANAGEMENT SCIENCE ASSOCIATES, INC.

understand your
customers



New Services for SAP Users

Drive more value from your ERP investment

Challenges of Continuity and Recovery for ERP

Enterprise applications including ERP, CRM, Supply Chain Management and eBusiness applications are the primary drivers of MSA's business. Application failures or short outage events have a major impact on clients' business operations – and frequently bring some firms to

a halt. Enterprise applications run in distributed multi-tier environments, often sharing common databases accessed by global users. Traditional Disaster Recovery planning and implementation can often result in interruption of such critical business operations.

MSA's Business Continuity and Disaster Recovery solutions, based on high-availability computing architectures, ensure that critical business operations are maintained. We believe we are the low cost, high quality provider of such services.

MSA's ERP Continuity Solutions

In 1999 MSA installed an ERP to run its business functions. We initially installed remote, log-shipped, hot standby servers to protect our databases. We've experienced several incidents without service interruptions since Go-Live in August 2000. MSA has both single site and

distributed cluster solutions to address complex n-tier problems of database, application, web and server implementations. Recovery time objectives and business requirements define the minimum continuity requirements that cost-effective technology must satisfy.

Our world-class BC/DR solutions include:

- ❖ Triad Solution reduces costs and risks
- ❖ Leverage Superior Domain Knowledge
- ❖ Real-time data replication over fiber for less than the cost of backup tapes
- ❖ Addresses multi-tier requirements

Planning

During the planning and blueprinting phase our consultants perform both hardware and database sizing functions, and configure a topography that supports development, testing, training, and all critical production environments.

Our business functional consultants identify gaps between the 'As is' and the 'To be' requirements and define solutions to resolve those gaps. Data Mapping and Analysis is often overlooked during the initial phase of an implementation, and our experience has shown

this can cause major delays, resulting in unbudgeted billable hours and in some cases missed milestones. We utilize experience from all areas of our business to provide training and to contribute to the development of Standards and Procedures for change control and testing.

Implementation

The business functional consultants implement the 'Blueprint' via functional configuration and interaction with the technical staff for gap resolution, development, and testing. MSA's consultants provide on-going basis, transport management system, and user security

authorization support, as well as training where required. Our technical staff not only provides the SAP skills for data migration (LSMW, BDC, Direct Input, Call Transactions, BAPI, CATT), but we can augment your legacy staff in most disciplines, develop and support interfaces (EDI,

IDOC, ALE, RFC or custom), provide reporting techniques (custom ABAP, ABAP Query, Report Painter, Report Writer, EH&S Reports), and perform necessary enhancements (User-exits, custom code, dialog programming, 3rd Party Software, SAPScript, and Smartforms).

Post-Implementation

Our post-implementation support team can provide software upgrade assistance, remote or on-site basis support, and work with technical staff on performance and tuning. Our functional business consultants can assist

with the blueprinting and implementation of functional expansion such as: CRM, HR, SEM, EH&S, etc. Our technical consultants provide production support, solutions for application maintenance and development

supporting: problem resolution, on-going system enhancements, functional upgrades, performance and tuning enhancements, and software upgrades.

Planning	Implementation	Post-Implementation
<ul style="list-style-type: none"> ❖ Business Process Analysis ❖ Sizing and Installation ❖ Topography Configuration ❖ Data Mapping and Analysis ❖ Standards and Procedures Development (Sarbanes-Oxley compliant) ❖ Training ❖ Test Plan Development 	<ul style="list-style-type: none"> ❖ Functional Support ❖ Basis Support ❖ Transport Management System ❖ User Security Authorization ❖ Data Migration, Interfaces, Reporting, and Dialog Programs ❖ Software Enhancements ❖ Third Party Software 	<ul style="list-style-type: none"> ❖ High Availability Hosting ❖ Disaster Recovery/Business Continuity ❖ Application Maintenance and Development ❖ Functional Upgrades ❖ Production Support ❖ Performance and Tuning ❖ Software Upgrades ❖ On-going basis support (Remote or On-site)

About MSA

Management Science Associates, Inc. (MSA) is a worldwide leader in analytical software and information-based systems. With over 900 employees and contractors, and 41 years of uninterrupted growth, we specialize in data management and data warehousing, business analysis, custom workflow software and integration, and Disaster Recovery/Business Continuity and other services requiring privacy, security and risk management.

MSA's data management services include designing, editing, cleaning and integrating databases. We have expertise in marketing, distributor sales and inventory, customer information, sales force intelligence, direct marketing and fulfillment data, e-commerce, internal sales and financial analysis, web hosting and design, creating customized CBT modules and monitoring of personnel performance versus established measures.

MSA's data analysis and business consulting services include gathering and interpreting data for customer loyalty and switching studies; list scoring and targeting, marketing mix analysis; segmentation; and promotion and price elasticity analyses. MSA's eSource system is integrated with ERP systems to achieve greater administrative efficiencies as well as to take advantage of lower prices often obtained by use of such methods and systems for procurement.



MANAGEMENT SCIENCE ASSOCIATES, INC.

Corporate Headquarters

6565 Penn Avenue
Pittsburgh, PA 15206-4490
TEL 412.362.2000 ♦ FAX 412.363.5598
WWW.MSA.COM

RockPointe Business Park

400 MSA Drive
Tarentum, PA 15084-2808
TEL 724.265.6500 ♦ FAX 724.265.5738

New York Office

1560 Broadway, Suite 300
New York, NY 10036-1518
TEL 212.398.9100 ♦ FAX 212.398.9121

Atlanta Office

817 West Peachtree Street, Suite M-100
Atlanta, GA 30308-1144
TEL 404.879.5144 ♦ FAX 404.879.5145

Chicago Office

3243 N. Talman Avenue
Chicago, IL 60618-4729
TEL 773.588.1199 ♦ FAX 773.588.1166

High Point Office

4000 Piedmont Parkway, Suite 442
High Point, NC 27265-9414
TEL 336.882.2430 ♦ FAX 336.882.2429

MSA FOCUS INTERNATIONAL LIMITED

United Kingdom Office

St. Hilary Court
Cophthorne Way
Culverhouse Cross
Cardiff, CF5 6ES
United Kingdom
TEL 011 44 29 2067 1760 ♦ FAX 011 44 29 2059 9733

Malaysia Office

Unit 827, Block A (Lobby B) Kelana Centre Point
47301 Petaling Jaya
Selangor
Malaysia
TEL 011 60 3 706 1358 ♦ FAX 011 60 3 706 1359