

# Intelligence

Butler Group Subscription Services

## Business Intelligence TECHNOLOGY AUDIT

### SAS

#### SAS Supplier Relationship Management Solutions

**Abstract** *Organisations need a better understanding of the ever-changing sourcing landscape in order to exploit opportunities and minimise risks. Operational systems and internal information alone cannot easily or adequately facilitate strategic supply chain related decision-making. SAS has developed a Supplier Relationship Management (SRM) solution that helps companies optimise relationships and increase profitability through better information and better understanding. Strategic sourcing can offer compelling benefits but can be difficult to implement, particularly on a worldwide basis. The resource implications of effective trading underscore the present demand to 'know' the organisation's suppliers and highlight the point that understanding the true value of each relationship should be a strategic imperative for organisations seeking competitive advantage.*

<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Creates the ability to increase data visibility between peers, which can be used to enhance process efficiency, drive contract compliance, and strengthen business relationships.</li> <li>• Valuable focus on improving relationships between trading partners through use of analytics to define and understand those relationships.</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• SAS needs to expand upon its ability to publish and present information to all those who require it, within the context of the Supplier Relationship Management Solution.</li> </ul>
<p><b>FUTURE POTENTIAL</b></p> <p>SAS plans to expand the role of its SRM solution to encompass the more demanding aspect of Supply Chain Management (SCM), incorporating tools such as Web-formatted viewers to monitor performance, and risk management functions to enhance factors such as decision support.</p>	

## ► FUNCTIONALITY

SAS Supplier Relationship Management aims to help companies optimise relationships and increase profitability through better information and better understanding of their supply chain. It is part of SAS' comprehensive range of Business Intelligence (BI) solutions, which also includes customer intelligence, organisational intelligence (dealing with the assets of a business), and enterprise intelligence (providing a high level view of the entire business). These solution areas are the subjects of a series of Butler Group Technology Audits that are companions to this report.

The initial rush towards the promised benefits of Business-to-Business (B2B) technologies was quickly hindered by serious integration issues, not only within organisations attempting to discover and deliver their own internal processes, but also between trading partners finding themselves unable to connect their business processes and systems to those of their peers.

Equally problematic was the issue that e-procurement, the most heavily promoted B2B methodology, was too heavily weighted towards the buy-side, often seen as creating value at the expense of the supplier. These factors combined to inhibit the acceptance of procurement and B2B technologies alike, and resulted in a new emphasis upon supplier enablement. In effect, although suppliers were initially positioned as inferiors in e-procurement, it has now been recognised that the relationship must be an equal one, bringing value to all participants without favour. SRM should therefore be viewed as a collaborative process between equals, and technology designed to support business relationships is becoming of paramount importance.

SRM builds upon similar foundations to Customer Relationship Management (CRM), but on a vastly greater scale – business processes at every level must be exposed to partner scrutiny throughout the enterprise, and, like CRM, SRM demands fundamental changes in the way the organisation operates. In particular, the concept of strategic sourcing is assuming greater prominence. Strategic sourcing involves finding the highest value, best service, lowest total cost sources of supply, while simultaneously ensuring availability for production.

Across an extended supply chain, consisting of participants of various sizes and industry backgrounds, this can prove to be a daunting task. In the view of SAS, the most certain means of supporting strategic sourcing activities between multiple partners involves the creation, capture, and ongoing use of BI, an area in which it has significant levels of domain expertise; applied to SRM, this information becomes Supplier Intelligence.

### **Enabling Transactions through Supplier Intelligence**

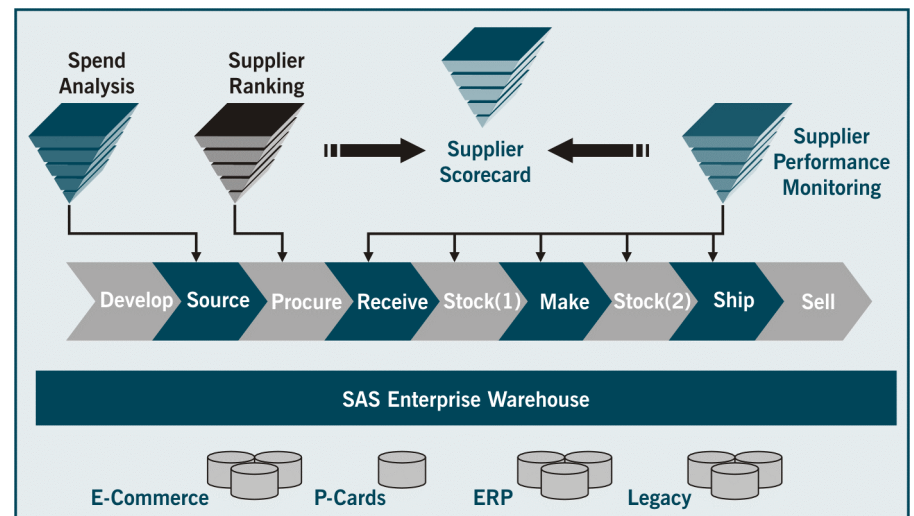
Today, the purchasing function, associated processes, and related data are often fragmented throughout the enterprise. This has come about because of the need to provide more autonomy and empowerment as well as the consequence of activities such as repeated mergers and acquisitions as the enterprise evolves to compete more effectively in a climate of accelerated change. The cost of fragmentation is poor purchasing practices that result from a lack of information.

With the advent of the Web, and particularly the gradual growth of B2B, several vendors have moved to accommodate the operational aspects of transactions between buyers. Clearly, sourcing savings go straight to the bottom-line and sales of an order of magnitude would need to be made in order to realise the same level of benefit achieved via more effective purchasing. The impact of procurement on company profitability and the fast evolving B2B environment are some of the factors behind the renewed focus on sourcing.

SAS views the use of Supplier Intelligence as involving the optimisation of relationships with partners, not only at an operational level but also at a strategic level. This relies upon 'knowing your suppliers', as SAS would put it. By analysing information both internal and external to the enterprise, companies can gain a level of understanding that should enable them to create the most profitable supplier relationships. Internal information provides an indication of spend patterns, quality, and reliability for example, whereas external sources can give some insight into levels of risk for instance. This type of procurement analysis is vital for identifying opportunities, minimising risk, and fully leveraging spend.

The growth of Web-based information and services now allows valuable third-party data and functionality to be more easily utilised, which is crucial for company positioning, strategic decision-making, and supply chain activities. Diversity of infrastructure and standards has also limited the opportunity to aggregate and analyse sourcing data. An information system that enables effective SRM must therefore support all channels of business information, and be able to seamlessly interpret across technology and business standards, to provide relevant and meaningful analysis on demand.

The most significant proclaimed benefit of sourcing solutions is that they will free resource to concentrate upon strategic activities. Unfortunately most companies do not have the Supplier Intelligence to help them save money and identify more profitable supplier strategies. They do not have a 'big picture' view that could help them understand where costs are occurring and better negotiate rates, where to consolidate or diversify their supplier base, and with which suppliers or commodities to begin implementation of e-commerce systems. The SAS SRM solution helps to identify and categorise suppliers and supports improved decision-making in order to maximise procurement opportunities.



### SAS Solution for Supplier Relationship Management

#### The SAS Supplier Relationship Management solution

As illustrated on the previous page, the SAS solution focuses on providing comprehensive sourcing analysis based upon an end-to-end architecture. It addresses the activities at either end of the strategic sourcing life cycle – initial spend analysis, and then, following the implementation of identified supplier strategies, monitoring to measure benefits and enforce agreements, so that the corporate strategy can evolve. SAS SRM is designed to help organisations to answer key questions about their suppliers, such as:

- Who are my top suppliers?
- What are my most common commodities?
- How can I leverage my spend?
- Which suppliers are at financial risk?

The problems faced in trying to answer these questions typically include points such as the fact that sourcing data is typically not organised to give accurate, consistent, and timely information. Aggregating data at an entity/commodity level is difficult, and identifying entity or corporate family relationships is also a difficult task. The SAS SRM solution breaks this process down into manageable steps and applies proven technology and business tools to help companies understand and improve their purchasing.

SAS advocates creating a sourcing information warehouse as the basis for SRM analytics. This approach allows all the necessary supplier and product information to be consolidated from across the enterprise into a delivery mechanism that is geared to satisfy analytical needs and information delivery – drilling up and down, analysis by different dimensions, etc.

The SAS solution enables all information, whether related to direct or indirect purchases to be merged into the warehouse, rather than limiting any analysis to one sourcing option, as may be the case with a specific procurement or supply chain solution. Warehouse data can be displayed as tables, charts, or report and output in HyperText Markup Language (HTML) for distribution. The data can be accessed by SAS and other industry standard tools for presentation or further manipulation.

SAS/Warehouse Administrator software performs the extract, cleanse, and transform process. It can take purchasing information from Enterprise Resource Planning (ERP)/Materials Resource Planning (MRP), e-commerce, legacy, or other sources, such as purchasing cards. SAS/Warehouse Administrator leverages metadata and standard templates to speed-up and shape data for analysis, creating repeatable and modifiable processes that make the warehouse easy to maintain and safeguard its value. A standard template for SAP exists and other templates for e-commerce vendors will become available as their offerings stabilise.

Identifying purchasing patterns is near impossible without some conformity to the data. The SAS SRM solution standardises supplier and commodity information across multiple formats, in recognition of the fact that standards are often fragmented across extensive supply chains, and solutions must accordingly be flexible. Commonly used standards such as Dun & Bradstreet's Data Universal Numbering System (D-U-N-S numbers) and the United Nations Standard Product and Services Classification (UN/SPSC) are the most likely standards to be encountered, and are fully supported; however, the SAS Intelligence Architecture enables all standards to be accommodated.

The same architecture enables the SAS SRM solution to work with various coding systems. Internally used customer codes are still preserved and users can drill-down to individual inventory items as necessary. The frequency of data rationalisation and re-assignment will depend upon the volatility of information within companies and industries. Many companies will conduct a strategic review of procurement or in-depth analysis on a discrete basis, annually, quarterly, or perhaps on a monthly basis at most.

On top of the standardised and enriched data residing in the procurement warehouse or procurement datamarts, SAS provides a series of analytical tools specifically designed to support intelligent, knowledge-based procurement decisions, utilising all supplier information. Using SAS tools organisations can analyse supplier trends, identify fraudulent activity, rate suppliers, and rationalise suppliers where appropriate.

SAS SRM operates as a Web-based application, and is a comprehensive and highly integrated solution designed to aid users in achieving returns through three main areas of sourcing:

1. **Strategy Alignment and Scorecarding** – The procurement scorecard supports rapid determination of how sourcing processes are functioning within a department, division, or organisation. Purchasing activities can subsequently be aligned with corporate strategy and measured against Key Performance Indicators (KPIs).

2. **Opportunity Exploration** – SAS provides robust investigative tools that enable organisations to consolidate their procurement activities, reduce costs, and minimise supply risk.
3. **Detailed Analysis and Decision Support** – The SAS SRM solution offers a point-and-click environment in which simple to advanced analytics can be utilised, and in which data can be manipulated and reports generated.

SAS SRM is the first of a series of strategic SRM tools. It is the spend analysis tool which allows companies to evaluate the supplier landscape. With OLAP capabilities it is possible to drill-down or up on spend, and analyse by a range of criteria, for example, analysing products by division, location, or supplier. Companies can gain a complete picture of their procurement that enables them to identify and therefore effectively manage different types of supplier relationships.

Supplier Portfolio Optimisation, an analytic tool within the SAS SRM solution, allows companies to more closely align spend and its supplier base with purchasing goals and objectives.

For example, an organisation can determine spend within geographic regions, optimise the number of suppliers by commodity, and target levels of compliance with external standards or directives. This product examines existing spend and uses linear programming techniques to the supplier portfolio according to user-determined factors.

SAS is also developing a third SRM-focused tool on procurement scoring and assessment. It ranks suppliers based on their performance measures such as quality, delivery, and other variables. This supplier performance information can then be fed into a balanced scorecard and used to influence future spend.

SAS' total SRM offering is a Web portal that provides global access to customised resources based upon SAS' Information Delivery portal. It gives access to operational systems, and information systems such as Spend Analysis, together with external information sources to facilitate the improvement of sourcing processes.

## ► DEPLOYMENT

Based upon the SAS Intelligence Architecture, the SAS SRM solution is available on the following platforms:

Category	Platform
Mainframe	OS/390, z/OS, CMS, VSE
PC	Windows 98, NT4, 2000, XP; Apple Mac
UNIX	Solaris, HP-UX, AIX, Tru64, IRIX, ABI+ for Intel, Linux
Mid-Range	OpenVMS

Acquisition of data is crucial for analysis, and SAS makes extensive use of its SAS/ACCESS Software interfaces to ensure data access regardless of the native databases or platforms being used by its customers. SAS/ACCESS interfaces include: DB2 under OS/390, VM, UNIX, or PC; CA-OpenIngres; Informix; ODBC and OLE DB; Oracle Rdb; Sybase; Microsoft SQL Server; and Teradata.

Access to non-relational database systems and other data sources includes SAS/ACCESS interfaces to: ADABAS; CA-DATACOM/DB; CA-IDMS; IMS-DL/I; PC File Formats; and System 2000 software.

## ► PRODUCT STRATEGY

SAS has been developing its domain expertise in the analysis and profitable use of business information for 26 years, and, in some respects, it is almost irrelevant which area of intelligence that these tools are being aimed at – SRM, CRM, BI, can all be subjected to close analysis in order to improve the quality of data being collected and subsequently undertake more informed strategic decision-making and the support of more efficient processes.

Increasingly organisations do not compete in isolation but upon the capability of their entire supply chain. If this is to succeed, then collaboration across the length and breadth of the extended supply chain becomes essential, as collaborative tools alone cannot return value to their users without close management.

One key point that SAS must address in order to fully succeed in the supply chain sphere will be the provision of a more flexible and versatile front-end. It is not enough to provide systems that can be accessed and used at the enterprise level, because by its very nature the supply chain will touch upon organisations of varying sizes and capabilities – inevitably, some will lack the infrastructure needed to interface with systems purely geared towards enterprise use.

The emerging Web services model, geared towards delivery of information using open standards such as eXtensible Markup Language (XML) and Simple Object Access Protocol (SOAP), highlights how Internet delivery of business and process-related documentation can circumvent this problem; in order for SAS to make a transition from SRM to the more tightly controlled (and therefore more potentially valuable) Supply Chain Management (SCM), it must deal with the issue of handling each and every point of contact, and this is part of the company's road map for the ongoing development of its SRM line.

In the current harsh economic climate, extracting value from the organisation's investments, both in terms of infrastructure and personnel, is essential, underscoring the need for management and the effective use of Intelligence still further; in Butler group's view, SAS is ideally positioned to provide an end-to-end solution in managing many of the problems arising from this issue.

Effective and appropriate supplier relationships will be crucial in providing new and better products and services, and a faster and more customised response to consumer needs, at a competitive price. Seamless B2B e-commerce will also require significant investment.

Butler Group believes that the SAS SRM solution allows enterprises to improve the management of their supplier base, take advantage of profit opportunities, and minimise procurement risks. By providing greater visibility and better understanding of supplier relationships the SAS SRM solution can provide a platform for more strategic activity and initiatives such as collaborative commerce.

## ► COMPANY PROFILE

SAS was launched from North Carolina State University in 1976, by Dr. Jim Goodnight, now President and CEO, and three of his colleagues. The company has its headquarters in Cary, North Carolina, and since 1976 has grown to encompass over 8,000 employees, and 156 offices worldwide. European Headquarters are located in Heidelberg, Germany, and in the UK, SAS has offices in Marlow, Manchester, and Glasgow.

SAS integrates leading data warehousing, analytics, and traditional BI applications to create intelligence from massive amounts of data. It is one of the leading vendors in the decision support and data warehousing market, providing integrated enterprise information-delivery systems. SAS maintains a significant budget for Research and Development (R&D), with the stated aim of driving its domain expertise in analytical intelligence and information capture out to end-users through its solution range.

The company is ranked as the largest privately held software company in the world, and has experienced 21 consecutive years of double-digit growth. Total revenues for the financial year ending 31 December 2001 were US\$1.13 billion. Revenues for SAS UK in the same period, increased by 19% to £60.1 million.

Over 38,000 customers at business, government, and university sites use SAS software solutions. Customers include 98 of the Fortune 100 companies, and 90% of the Fortune 500. SAS has a strong network of partners through its SAS Alliance programme, including Computer Sciences Corp., Hewlett-Packard, IBM, Intel, Intraspect, KPMG, Origin, PricewaterhouseCoopers, and Sun Microsystems.

## ► SUMMARY

The SAS SRM solution provides the kind of transparency that translates directly into impressive bottom-line benefits. This solution addresses many of the serious obstacles that prevent enterprise-level organisations from executing supply chain processes in a cost-effective and robust manner, and Butler Group believes that its implementation will result in measurable returns in a short amount of time.

## ► CONTACT DETAILS

### **Worldwide Corporate Headquarters**

SAS Institute Inc.  
100 SAS Campus Drive  
Cary  
NC 27513-2414  
US

Tel: +1(919) 677 8000  
Fax: +1(919) 677 4444

[www.sas.com](http://www.sas.com)

### **UK Headquarters**

Wittington House  
Henley Road  
Medmenham  
Marlow, Bucks  
SL7 2EB  
UK

Tel: +44 (0)1628 486933  
Fax: +44 (0)1628 483203

E-mail: [sam.wood@suk.sas.com](mailto:sam.wood@suk.sas.com)

[www.sas.com/uk](http://www.sas.com/uk)

### **EMEA Headquarters**

SAS International  
PO Box 10 53 40  
Neuenheimer Landstr. 28-30  
D-69043 Heidelberg  
Germany

Tel: +49 6221 4160  
Fax: +49 6221 474850

[www.sas.com](http://www.sas.com)

**Important Notice:**

This report contains data and information up-to-date and correct to the best of our knowledge at the time of preparation. The data and information comes from a variety of sources outside our direct control, therefore Butler Direct Limited cannot give any guarantees relating to the content of this report. Ultimate responsibility for all interpretations of, and use of, data, information and commentary in this report remains with you. Butler Direct Limited will not be liable for any interpretations or decisions made by you.

For more information on Butler Group's  
Subscription Services, contact:

Europa House, 184 Ferensway, Hull, East Yorkshire, HU1 3UT, UK  
Tel: +44 (0)1482 586149 Fax: +44 (0)1482 323577 [www.butlergroup.com](http://www.butlergroup.com)