



SAS's Spatial Directions

Joe Francica, *Directions Magazine*, March 22, 2005

Joe Francica recently had the opportunity to correspond with Rob Stephens, director of technology strategy for SAS' Worldwide Marketing Division, and Jim Metcalf, director of technology platform products, to discuss how SAS is fitting in to the spatial market. We expect a briefing on a new map-enabled product in the beginning of April, and wanted to take this opportunity to set the stage so to speak.

Joe Francica (JF): How important is location technology to SAS' product strategy and in the realm of business applications that SAS develops? Do your customers see the advantages of leveraging the analytical tools of business intelligence with the visualization benefits of location technology? Is the location-based information solely important because of its visual appeal or do customers now perceive the how spatial analytics could be used.

SAS: As a vendor of business analytics software, SAS believes that it is critical to consider the full spectrum of data and technologies available in order to get the maximum value from your information assets. As such, SAS has developed a full function intelligence platform that includes a broad range of data access, integration and analysis capabilities. We believe that location is an important dimension of analysis and presentation that can provide great value to our customers. To that end, we have developed a number of products over the years that deal with spatial information starting with SAS/Graph and the GMAP capabilities and continuing through more recent products including SAS/GIS, SAS/GEO, and the SAS Bridge for ESRI.

SAS/GIS specifically was designed to meet customers' requests for a more tightly integrated way to present the location dimension of their data and analysis results without having to perform repeated import and export operations. More recently, we have engaged in a partnership with ESRI and developed the SAS Bridge for ESRI to allow more seamless passing of 'business intelligence' data and 'spatial data' between systems to provide a higher level of integration between market-leading SAS and ESRI products.

The greatest historic demand for the utilization of location data and technologies within our customer base has been focused on the visualization of data and analytic results. However, in the last few years the rate of request for integration of traditional SAS data analysis and spatial analysis has increased. We have seen these requests from traditional GIS areas in government and military, as well as in commercial areas such as retail. We are also seeing an increase in requests from other industry areas such as financial services and telco.

With the release of SAS9 and the SAS Intelligence Platform, we are focused on providing a set of tools and supporting infrastructure that deliver a robust foundation for enterprise level business intelligence implementations. A fundamental part of this approach is leveraging open standards for data access, messaging, application development, etc. Critical to this approach is the expectation that SAS and our customers will take advantage of this platform to improve existing integration with ESRI products, as well as expand that integration to allow for the development of new tools and focused business applications that integrate spatial analysis into the business application processes.

JF: The SAS website includes quite a long list of industries on which SAS focuses (e.g. automotive, banking, energy & utility, financial, government & education, healthcare, insurance, life sciences, manufacturing, media, retail and telecommunications). Do your industry managers understand the potential in using spatial as a differentiator? Has it been fully embraced at the highest levels and is it trickling down? Or is the pressure coming "up from below" to do so?

SAS: In the last eight years, SAS has expanded our offerings from tools and services to include a long list of prepackaged applications and industry solutions. This evolution reflects that the ultimate value for our customers is in the domain specific application of the technologies to solve real world problems. Increasingly our customers are looking to buy applications that include prepared data models, data transformation and cleansing processes, and domain specific analysis processes that assist them in solving high value business problems more quickly.

In effect they are looking to get beyond traditional business intelligence by providing a consistent process to all constituents across the enterprise and putting access to information and analysis capabilities into the hands of people who need to make fact-based decisions quickly and confidently. New domain specific business applications demand the inclusion of all relevant information including location. SAS industry managers are charged with understanding the critical business processes specific to that industry. When they articulate location-related needs, we work with them to identify the best technologies to meet the customer's application/process needs. So the answer is yes – they understand the potential of location-related analysis as a differentiator in applications. Our goal is to have location data and analysis considered equally with all other types of technologies when considering the best approach to solving the problems.

The drive to include spatial data and analysis in SAS applications is embraced at all levels – from sponsorship for SAS spatial technologies and support for our ESRI partnership at the top to the drive to increase the utilization of spatial technologies from within the strategy and product management groups.

JF: How is SAS relating to the GIS industry currently? I know you have a very important strategic relationship with ESRI. Can you tell our readers more about that strategy and SAS Bridge for ESRI, and how it relates to SAS/GIS? Does SAS hope to develop niche applications using location technology in a variety of industries?

SAS: SAS has a legacy of support for spatial visualization and we are pursuing the integration of more sophisticated spatial analysis capabilities via our partnership with ESRI. The SAS Bridge for ESRI is focused on improved data access between SAS and ESRI and was delivered to the market in 2003. [Further, this month SAS will deliver to the market a Web-based GIS-enabled query and reporting product that integrates the SAS BI Server with ESRI's ArcGIS 9 server.] As we continue to develop enhancements to our existing and new applications, we will continue to leverage the partnership and extend integration as customer needs are identified.

JF. Do your customers see the advantages of leveraging the analytical tools of business intelligence with the visualization benefits of location technology?

SAS: Yes definitely – this is the most frequent request that we get in relation to spatial technologies. Visualization of the location relationship of important business information and the results of analysis results are a powerful communication and understanding medium for most people. We have found that this is an initial step that often leads to the evolution of the next set of questions regarding spatial relationship analysis. This pattern is exactly what is exhibited in most successful business intelligence/analytic applications.

JF: SAS' website talks about "Unlike vendors who can only offer disconnected point solutions, SAS brings you a complete suite of award-winning solutions built on an integrated Intelligence Platform designed to give you the ultimate reward: The Power to Know. " How does that relate to SAS' GIS strategy?

SAS: SAS9 is an open and interoperable business intelligence platform. This means that we set design goals to ensure that SAS9 is focused on seamlessly fitting into an enterprise business intelligence environment and being a "good corporate citizen." For this reason, the SAS tools and applications are very user-friendly and relevant to the business user, as well as scalable and easily managed. Also, because we are more than just a tools vendor, SAS9 provides a robust set of application programming interfaces that can be used to customize standard application development languages such as Java.

This approach sets the stage for an expanded integration with the robust spatial data access, analysis and visualization capabilities of ESRI. Improved integration equals improved opportunities to bring spatial technologies into business analytics applications.

JF: What is the long-term strategy at SAS for dealing with spatial data/information?

SAS: We believe that spatial data and spatial analysis provide important business opportunities for our customers. Our goal is to have location and location analysis – not just visualization – considered as an equal (and understood) critical dimension in daily business intelligence/business analytics endeavors.