

IDC PERSPECTIVE

Highlights from the 2018 European SAS Conference for Industry Analysts

Philip Carnelley
Andrea Sangalli

Helena Schwenk
Lorenzo Veronesi

Maggie Slowik
Chris Pennell

Milan Kalal
Silvia Piai

EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: Highlights from the 2018 European SAS Conference for Industry Analysts

This IDC Perspective provides an overview of the key highlights from the annual European SAS Conference for Industry Analysts, which this year took place in Dubrovnik, Croatia, on May 30-June 1. The event featured updates on SAS' product portfolio, strategic direction, and emerging technologies, particularly on SAS Viya, SAS' stance on Internet of Things (IoT), and its new offering, Results as a Service. It also highlighted solutions for different major industries and the public sector.

Key Takeaways

- SAS has grown consistently over the years to its current impressive scale — it is profitable; debt-free; with over \$3.2 billion in worldwide sales, of which \$1.18 billion was from EMEA; and has 83,000 customer SAS sites.
- Its SAS Viya offering, a micro-services rearchitecting of its core functionality, enables customers to embrace cloud and new open approaches such as R coding, while still utilizing its core SAS models and data. The product is now at version 3.3.
- SAS' cloud sales grew 15% in 2017, with 30% attributed to new cloud sales.

Recommended Actions

- Companies new to SAS should consider Viya 3.3. The platform offers an open architecture, providing users with reliable, scalable, and secure analytics management. For existing SAS users, it's time to reassess their SAS platform strategies.
- For companies with little knowledge of and talent in analytics, consider SAS's new Results-as-a-Service offering on a project basis, rather than investing in a potentially costly analytics solution or consulting engagement.
- Organizations that are deploying IoT sensors and aiming to do more with their data should explore SAS' capability to support a complex IoT analytics life cycle.

Source: IDC, 2018

SITUATION OVERVIEW

This IDC Perspective summarizes key takeaways from the annual European SAS Conference for Industry Analysts, which this year took place in May/June in Dubrovnik, Croatia.

SAS is a veteran business and data analytics software provider that has grown consistently over the years to its current very impressive scale – it is profitable; debt-free; with over \$3.2 billion in worldwide sales, of which \$1.18 billion was from EMEA; and has 83,000 customer SAS sites. Although growth has been modest of late, it should accelerate in 2018, supported by growing cloud sales.

The move to the 3rd Platform (particularly cloud) and Innovation Accelerators (particularly artificial intelligence or AI and IoT) posed challenges to SAS in maintaining its position and relevance. However, these developments also presented new opportunities, and SAS is focused on these. Driven by the digital transformation mandate, European companies are increasingly moving to become data-driven in their operations and strategies, and advanced analytical software is playing an increasingly important role. SAS therefore is in a good position to address that agenda.

The company has moved to address the 3rd Platform world by developing SAS Viya, a micro-services rearchitecting of its core functionality, which enables customers to embrace the cloud and new open approaches such as R coding, while still utilizing their core SAS models and data. The product is now at version 3.3, and adoption is becoming common among SAS clients. The company's cloud sales grew 15% in 2017, with 30% attributed to new cloud sales.

It's also worth noting that in recent months, SAS appointed long-term employee Oliver Schabenberger to a new role of EVP, COO, and CTO. With SAS since 2002, Schabenberger has been driving the development of SAS Viya and is now responsible (among other things) for driving the company's response to AI and machine learning (ML), blockchain, and IoT. He has also evolved the company's go-to-market strategy in Europe, providing a more focused and targeted approach to the region by splitting up emerging and mature markets so each can be nurtured independently. In IDC's opinion, Schabenberger's appointment to this new role will serve to accelerate SAS' product development and transition to the 3rd Platform.

Portfolio, Direction, and Emerging Technologies Update

Key highlighted strategies at the European conference include the following.

Results-as-a-Service

The newest addition to the SAS portfolio is the Results-as-a-Service offering to accommodate customers that do not have the right resources and infrastructure, or simply do not know much about SAS software. This proposition works by having clients describe and provide a specific business challenge, data, and scope of work to begin with. Using a secure delivery model, a team of SAS consultants then deliver the solution. A case study includes a U.S. auto manufacturer that uses this managed service to analyze connected vehicle data and track fleet performance.

The proposition is most suitable for SMBs that may not have a large budget but expect quick return on value. For SAS, it's a good way to understand repeatable issues and best practices in the market.

AI Everywhere

AI remains one of the hottest topics in businesses today. IDC research finds that although it is a nascent market – with around 15% European organizations having active deployments – demand for AI technologies including machine learning, natural language processing, and image recognition is set to grow significantly over the next two years. This shift toward analytics is part of the drive by organizations to become more intelligent digital businesses, using AI to improve productivity, enhance automation, and deliver new or better products and services to customers.

Given SAS' leading position in advanced analytics, IDC believes the company has more to do to raise its market profile and amplify its voice around AI and machine learning in what is fast becoming a noisy and hotly contested market. For SAS, this is more a case of market positioning rather than technology investment. The company already has a lot of IP around data platforms and AI, as well as an enviable array of advanced algorithms that power applications including those for fraud detection, personalized customer recommendations, and predictive maintenance.

As European organizations plan their AI investments, the company has an opportunity to bring more of its analytics skills and expertise, domain knowledge, and technology to bear on the market. But it also requires SAS to become more a trusted advisor to organizations to help them understand where and how AI could be applied to business processes to augment or improve decision making. Evolving its strategic partnerships with service providers will need to be part of this.

IoT

As data volumes explode with the rapid rise of IoT, pressure is building on organizations to exploit that data. With growth accelerating in this area – 60% in 2017 – SAS sees a considerable opportunity to exploit this momentum, and it has set up a separate business unit dedicated to IoT incorporating technology, marketing, and sales channels. Jason Mann was named VP of the new global IoT division at SAS, reporting directly to the CTO.

Being able to pull all those together, SAS is better-positioned to focus on opportunities from specific use cases by industry and provide powerful IoT analytics software that covers the entire analytics life cycle – batch, streaming, and edge. The concept of distributing analytics out to the edge (i.e., closer to the origin of the data) has received a lot of attention at SAS, as the company spends quite a bit of work verifying and validating that procedures work with existing equipment.

Go-to-Market

SAS has identified a shortlist of use cases across its several industries to focus on. SAS has always been strong in the heavy industries vertical, which are perceived to be the most mature in terms of IoT. Energy and transportation are also among the core industries, but SAS is also starting to deepen its IoT expertise in other industries such as retail, health, and life sciences.

IoT Ecosystem

The SAS IoT division has been actively developing a strong ecosystem of IoT partners to bring together best-in-class technology and expertise. For example, SAS and Cisco unveiled the Cisco SAS Edge-to-Enterprise IoT Analytics Platform in 2016. It brings together all the hardware and software needed to analyze IoT data, so customers do not need to build an IoT platform from scratch. SAS brings similar benefits to customers through long-standing partnerships with Hewlett Packard Enterprise and Intel. Other members of the ecosystem are Jacobs, OSIsoft, and Telit.

In IDC's opinion, advanced analytics and AI will be essential – not optional – to take advantage of IoT, and SAS could play an important role.

Focus on the Midmarket and Channel Partners

SAS also announced a new focus on partners as a route to market and to drive uptake of SAS solutions, particularly for small organizations and – linked to that – a focus on new opportunities in the midmarket. The plan will require making changes to the company's direct/field sales model, with the ambition to generate over 50% of revenue from channel partners by 2020. From a product perspective, this effort will be enabled by SAS' IoT expansion plans and making products more midmarket-friendly.

Industry Views

Below is IDC's take on the event and announcements from an industry by industry perspective.

Government

Forecasting, data mining, and text analytics – most government agencies will use one or more of these techniques to solve a specific business problem. But in today's customer-centric environment, government agencies must provide more transparent, accessible, and responsive services. The traditional approach of selecting a single tool to address the problem means that agencies are failing to optimize the data at their disposal. At the same time, the lack of in-house skills and adequate tools to address data quality issues remain strong barriers to the adoption of more powerful toolsets.

With the release of SAS Visual Text Analytics earlier this year and a new release of SAS Visual Data Mining and Machine Learning, SAS has provided government agencies with tools that are suited to addressing these challenges.

SAS Visual Text Analytics enables agencies to extract value from unstructured data through the application of natural language processing and machine learning. This includes text mining, contextual extraction from data, categorization, and sentiment analysis. On the other hand, SAS Visual Data Mining and Machine Learning offers users an end-to-end visual environment covering accessing data sources to deployment of models into live environment.

Use cases for solutions focuses on agencies in which there is a large amount of unstructured data, such as in case management notes and stored images. At the same time, agencies are looking to combine data spread across different systems, such as in tax, criminal justice, or healthcare agencies. Using these tools can assist agencies to discover patterns and relationships in data that would otherwise not have been spotted.

The combination of these types of tools with SAS Viya (in-memory version of SAS' core platforms designed to be consumed as a service) can be very tempting for government agencies. However, financial costs can be hard to balance in budget-constrained times. Here, SAS is changing its approach and moving toward outcome-based contracting, helping to solve the problem and improve outcomes for citizens, rather than simply offering up a traditional licensing approach with a managed services wrap. This is a different engagement model for SAS, and it will be some time before we see the impact of this. However, the combination of flexible tool sets that can combine structured and unstructured data with automation based on an outcomes-based contract will certainly be of interest to agencies.

Health and Life Sciences

Healthcare and life sciences represents 11% of SAS revenues. SAS' capability to support customers along the full analytics life cycle (data, analytics, deployments) is continuing to be a differentiator and driving growth in this segment.

SAS has further improved its value proposition around data management, enriching its smart data preparation with self-service tools and application programming interfaces (APIs) that enable analysts to spend more time on value-added activities such as data modeling. SAS has also further enhanced its investments in cloud, considering it not only as capacity enabler, but as the foundation for a flexible and collaborative data platform that underpins innovation while maintaining compliance under control as it enables organizations to implement data governance policies more rapidly and consistently. These capabilities appeal to the compelling need to manage the complexity of ever-growing and varied data volumes spurred by advances in research in key areas such as personalized medicine and integrated care, and by the increasing importance of the connected patient phenomenon. Leveraging these capabilities, SAS has also developed specific solutions for compliance to General Data Protection Regulation (GDPR) and Identification of Medical Products (IDMP) regulations. Interestingly, even if both healthcare and life sciences are traditionally regulation-driven sectors, these solutions have not started to receive the expected interest. This confirms IDC Health Insights findings that for GDPR, healthcare providers and life sciences organizations only have limited and only necessary investments in the short term, and they are adopting a wait-and-see approach. However, IDC expects this situation to evolve as soon as there is more jurisprudence on GDPR and clarity about the evolution of national legislation for healthcare data. For IDMP, this might be driven by the hopes of a further postponing of the deadline, as already happened in the past, and by the fact that track-and-trace solutions providers are aggressively targeting the market, but with more tactical solutions.

Throughout the event, SAS executives remarked several times on the transition to the Results-as-a-Service paradigm, which epitomizes how SAS is repositioning itself in the digital transformation game from a marketing perspective. SAS is finally getting more vocal on how its extended advanced analytics offering helps healthcare and life science organizations address challenging market dynamics and deliver business value. Now that algorithmic improvements have boosted the performance of deep learning methods and a new class of neural networks have been developed and applied to natural language processing, imaging analytics, IoT data streams analysis, and so on, opportunities for the health industry driven by AI and advanced analytics are growing exponentially. SAS presented how it is working with partners and clients on a series of use cases that cover the whole health value chain, from research to patient care and population health. There is a common thread in each of the customer case studies presented, which is the capability to drive new insights by combining and analyzing different sets of data. For example:

- The SAS Real-World Evidence solution is supporting project DataSphere in using datasets obtained from multiple academic and industry phase III cancer clinical trials, beyond the initial purpose from which they have been collected and analyzed and supporting new clinical trials.
- SAS Data Visualization is helping different U.S. states in addressing opioid epidemics, combining data from different data sources such as prescription, overdose reports, and treatment effectiveness data.
- SAS Analytics is further informing clinicians decisions on repeating cycles of chemotherapy for patients at Cancer Center Amsterdam VU University by combining and analyzing patients imaging and non-imaging data
- SAS Analytics has been chosen by the Renown Institute for Health Innovation to develop a health determinants platform that will support population health policies within the Healthy Nevada project

Manufacturing

Manufacturing accounts for 5% of global software revenue for SAS, with a reported higher growth particularly in Asia/Pacific. The manufacturing industry has been on SAS' radar for many years, with a value proposition that is linked to a set of three main use cases: warranty and quality, predictive maintenance, and CRM. While these three application areas covered three fundamental subjects for the industry, SAS still lacked a platform-driven approach that could reach beyond business silos.

Today, SAS is actively seeking to grab the opportunity provided by IoT and cloud to establish a more thorough approach to analytics, which sees these tools not as a way to get specific information, but as a fundamental enabler of new business models. Advancements in the value propositions around cloud platform and analytics execution, edge analytics, and event stream processing enable SAS to position the company in a new way. During the event, SAS referenced few yet interesting technology applications that are of interest to manufacturers.

- Honda Motors uses SAS to directly analyze customer conversations, with the aim to improve portfolio management and product quality based on customer feedback.
- Bridgestone leverages SAS for improving marginality by linking analysis of machine data in high-heat extrusion processes to improve quality.
- Octo Telematics leverages SAS for enabling data-driven car insurance frameworks such as usage-based insurance (UBI). Examples include monitoring windshield wipers to infer weather conditions or checking for front vehicle tailgating to highlight potentially dangerous driving patterns.
- GE Transportation needed to go a long way to create new degrees of customer experiences by leveraging locomotives' collected data. The company deployed a Predix-based solution with SAS Viya under the hood to monitor its fleet of 1,100+ installed locomotives in the U.S. This was essential to comply with strict train control standards that are mandatory to govern the behavior of trains to ensure safety. On top of that, GE also took advantage of all the data it collected to deliver advanced offerings – such as maintenance-as-a-service for train status visibility and arrival time prediction and for uphill/downhill power optimization – to its customers.

Retail

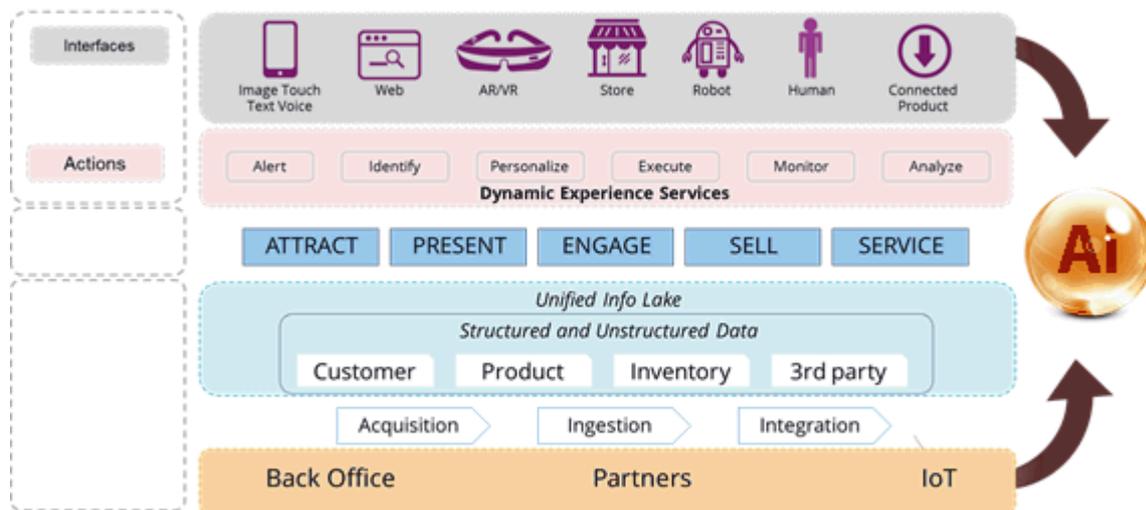
Even if the retail business remains marginal (5% of total software revenue) compared with industries such as banking and capital markets (32%) and government (17%), it's one SAS' fastest-growing industries. It is moving from a core proposition around merchandise assortment planning and optimization to a broader offering that includes omnichannel analytics, customer experience management, and IoT solutions specific for retail. For example, the Shop Direct Group is using SAS to analyze data and create statistical models and to build, plan, and execute marketing campaigns. Recently, it also implemented SAS Event Stream Processing (SAS ESP), linking it SAS Real-Time (SAS RTDM) Decision Manager to track and personalize digital experiences, leveraging the real-time contextual data.

SAS RTDM and SAS ESP are core solutions of the SAS offering to face the new connected world, where IoT devices represent a key element along the entire value chain, from the upstream supply chain to the in-store customer experience, to collect useful data. Adopting an advanced streaming analytics approach, retailers can manage and analyze such data to ensure a more agile supply chain and increase knowledge about customers. SAS should take a step forward, fully integrating SAS RTDM and SAS ESP with the new cloud-based SAS Customer Intelligence 360 solution to execute an effective and seamless customer experience based on real-time contextual data turned into actionable insights.

Customer experience is becoming a new way to do business for retailers, and smart data management, AI-powered streaming analytics, and dynamic customer engagement are the foundational elements of new an agile customer experience architecture (Figure 2) that provides seamless and dynamic composition of customer services leveraging information, processes, and interfaces consistently. The embedded artificial intelligence layer enables innovative approaches, changing the knowledge map from customer behavior to the characterization of its social context.

FIGURE 2

New Customer Experience Architecture



Source: IDC, 2018

Completing this integration between the on-premise and cloud offering, SAS will be well-positioned to support retailers in their digital transformation journey, where customer experience is at the center.

ADVICE FOR THE TECHNOLOGY BUYER

IDC has the following advice for technology buyers:

- Companies new to SAS should first consider Viya. The platform (now on its 3.3 edition) offers an open architecture, providing users – from business data scientists to executives – with reliable, scalable, and secure analytics management. If you are an existing SAS user, it's time to reassess your SAS platform strategy now that SAS Viya offers viable options on a more modern architecture.
- Firms with little knowledge of and talent in analytics with a pressing business problem and a desire to leverage the SAS portfolio should consider SAS' new Results-as-a-Service offering on a project basis, rather than investing in a potentially costly analytics solution or consulting engagement.

- Organizations that are deploying IoT sensors and aiming to do more with the data generated should explore SAS' capability to support a complex IoT analytics life cycle across the different tools and capabilities needed to analyze and understand mass volumes of IoT data to make more intelligent decisions, introduce stronger AI, and add value from production to supply chain to marketing and beyond.

IDC's recommendations for industries include the following.

Government

Driving operational performance and improving citizen experience are often in the top 3 business priorities for government agencies, and both require the use of analytical tools and data. However, recent IDC research found that only 33% of respondents were using or planning on using Big Data and analytics.

The complexity and cost of bringing data together, never mind legal issues, are often the biggest barriers to agencies adopting analytical tools. To be successful in this market, analytical tool providers need to get creative with how they contract with government, while providing simpler ways to consume some of the functionality that is provided.

Healthcare and Life Sciences

Getting value out of the exponentially growing volumes data from different and fragmented sources remains a key challenge for healthcare providers, public health authorities, and life sciences that still need to be addressed from a more strategic perspective.

Healthcare and life sciences executives should leverage analytics providers' use case specific or Results-as-a-Service offering to address specific industry challenges in the short term, as well as building the business case for establishing the foundations for a more articulated, reusable, and scalable information management strategy. This will help them to ensure greater data quality, availability, and integrity, which is key to ensure the transition toward the digitally transformed, data-driven enterprise.

Manufacturing

Recent IDC research highlights that Big Data and analytics initiatives vary considerably in Western European manufacturing, with only a third having adopted the technology in 2018. Given the pressure to maximize return on assets, innovate, and engage with customers, manufacturers need to leverage analytics more and consider the option of appointing a data officer who decides which data is needed in the first place.

Big Data and analytics will increasingly become a key differentiator for manufacturing. Do not delay investments, but rather consider easy-to-use technologies that can deliver a good user interface and consequently user experience, because if these two factors are fulfilled, then analytics leads to the empowerment of people on the shop floor.

Retail

A core component of AI-enabled retail transformations is data. Data is fundamental for training models that address questions, make recommendations, and learn and improve over time. But the flow of incoming data of all types, much of it unstructured, is too great to manage with the dated procedure.

Retailers should prioritize the AI/ML solutions implementation to define a different approach to managing the data life cycle. Fully embracing these innovative technologies enables:

- Building massive ingest capability
- Having flexible and fast access to data
- Scaling easily according to demand
- Reducing cost of operations

Adopting this smart data management approach, retailers should always consider organizational implications, especially in terms of required AI/ML skills. Retailers should decide if they want to implement the necessary AI foundations with an insights-as-a-service approach or a buy approach and define how to source new talents.

LEARN MORE

Related Research

- *Market Presentation: 5 Big Data and Analytics Trend to Watch in 2018 and Beyond* (IDC #EMEA43595318, February 2018)
- *Analytics: Unlocking Value from IoT Data* (IDC #EMEA42829517, June 2017)
- *SAS Analyst Conference Highlights: Platform All the Way* (IDC #US42400217, March 2017)

Synopsis

This IDC Perspective provides an overview of the key highlights from the annual European SAS Conference for Industry Analysts, which took place in Dubrovnik, Croatia, on May 30-June 1. The three-day event featured updates on SAS' product portfolio, strategic direction, and emerging technologies, with a focus on SAS Viya, SAS' stance on IoT, and its newest offering, Results-as-a-Service. It also highlighted solutions for different major industries and the public sector.

"The business analytics marketplace is evolving fast," said Philip Carnelley, AVP, Enterprise Software at IDC Europe. "This conference underscored and clarified the moves SAS is making to ensure it remains relevant for customers of different sizes and across a range of industries in Europe and beyond."

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

IDC U.K.

IDC UK
5th Floor, Ealing Cross,
85 Uxbridge Road
London
W5 5TH, United Kingdom
44.208.987.7100
Twitter: @IDC
idc-community.com
www.idc.com

Copyright Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/offices. Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or web rights.

Copyright 2018 IDC. Reproduction is forbidden unless authorized. All rights reserved.

