

Aras ACE 2018: Fast Track to Digital Transformation

CIMdata Commentary

Key takeaways:

- *Industrial companies such as Audi, BMW, Microsoft, and Schaeffler are using the Aras PLM Platform to solve complex problems in support of their digital transformation programs.*
- *The Aras PLM platform continues to grow in breadth and depth as execution against their public product roadmap continues.*
- *Aras is starting to deliver on last year's announcement on support of Maintenance, Repair, and Overhaul (MRO), an important and often extremely profitable lifecycle phase.*
- *Last year's \$40M investment by Silver Lake and GE Ventures has enabled Aras to significantly grow their staff, including a doubling of the product management team.*
- *Systems Engineering and Simulation Process and Data Management (SPDM) are new strategic focus areas for product development and M&A investments.*

CIMdata attended the annual Aras customer event, ACE 2018, held in Indianapolis on March 20th through 22nd. The format mirrored last year's, with keynotes for all attendees and multiple parallel tracks. The two and one-half day agenda had up to seven parallel tracks and 20 unique sessions per day. The attendees included a diverse range of users from manufacturers and other industrial companies, as well as the usual implementation partners, industry and financial analysts, and academics.

On Monday, March 19th Aras again hosted a technical track for developers looking to connect to and interact with the Aras development team and their peers in other companies, and a track for Aras partners where strategy, messaging, partner issues, and tips were reviewed. Most interesting in the partner session was the six partners that gave short presentations on their integration products. CIMdata believes that it is unlikely that any single solution will be able to provide 100% of the technology to support a product innovation platform, so the integrations offered by Aras partners along with the enthusiastic support from Aras should go a long way to helping industrial companies meet their product innovation, as well as digital transformation objectives.

New this year, and also on Monday, was a four-hour training class that used automotive data and showed how Aras Innovator supports Corrective And Preventative Actions (CAPA) with its Quality Management solution. Several attendees commented on how this gave them new insights on how to bring the capability to their organizations.

Aras CEO Keynote

Most of Mr. Peter Schroer's keynote was focused on the community oriented around Aras and what defines success. Mr. Schroer believes that success for Aras means the ability to tackle and solve complex problems and the measure of success is the growing list of well-known companies using the Aras product innovation platform to solve problems such as enterprise change management and complex configuration management. He was especially proud of the recently announced configuration service that supports variant management. CIMdata believes that having an advanced configurator available as a core service will dramatically simplify the creation of product variants especially helping companies focused on mass customization.

Since it is implemented as a core service, it will be able to easily leverage all standard Aras capabilities like versioning and lifecycle states. We look forward to ACE 2019 user presentations on this topic.

Customers Keynotes

Audi, BMW, and Microsoft are among the world's best-known brands and Aras customers. All gave keynotes talking about how they use the Aras platform to address different aspects of the digital thread at their companies.

- Mr. Martin Neff, Chief Architect, Audi Systems Engineering, reviewed how his team is building a complete environment to support systems engineering needs, especially for autonomous vehicles.
- Ms. Verena Held, Project Lead for the IT-project verification management, BMW Group, discussed how BMW built a pilot solution and is moving forward on the development of a validation management solution for BMW products.
- A team from Microsoft including Mr. Boris Conoetz, Jr., PMP, Director, Enterprise PLM, Mr. Mikko Keppo, Director, PLM/PDM DevOps Lead, and Mr. Koohyar Dadkhah, DBA, spoke on how they are moving their production Aras implementation to the Microsoft Azure cloud and leveraging PLM data using the Power BI reporting tool and data lake technology with system performance that meets or exceeds that of on-premise.
- Mr. Dirk Spindler, Senior Vice President R&D Processes, Methods & Tools Schaeffler AG, gave an overview of the growing complexity his company is facing and how they are using Aras technology as the backbone for their Engineering Cockpit solution.

CIMdata was pleased to see both the diversity and scale of solutions being developed and deployed at these large, well-known companies.

About the Product

Mr. John Sperling, Aras' Vice President of Product Management, provided an overview of new solutions and enhancements. Beyond the new products and enhancements, Mr. Sperling talked about their concept of "incorporation"—their process for bringing legacy solutions onto the Aras platform, the exact process being used with the recently acquired Impresa MRO technology. Incorporation is not new, it is fundamentally similar to porting, but Aras' approach is somewhat different. They extend their platform with new services to add unique functionality and leverage their existing services for example, security, workflow, and visualization. While other solution providers have tried incorporation, it's usually expensive, and after an acquisition is completed and the revenue integrated, there is not much financial incentive to complete the technical integration. Since Aras only has to add unique capabilities and the services add value to their platform, they have an incentive to complete the incorporation. CIMdata is looking forward to seeing the rollout and adoption of MRO support within the Aras platform which is currently scheduled for the first half of 2019. It should help customers with service components in their business to better integrate lifecycle processes.

Additionally, Mr. Sperling reviewed a large number of new solutions, enhancements to existing solutions, and talked about upcoming solutions. The best way to review these is to check out the online public roadmap at <https://www.aras.com/plm-roadmap/>.

Mr. Rob McAveney, Aras' Chief Architect, talked about the Aras vision and roadmap and how it supports digital transformation. Mr. McAveney made the point that digitalization is much more than just a pile of electronic data and files stored in a vault. CIMdata agrees with Mr. McAveney's point and believes that the only way for digital transformation programs to achieve significant value is to ensure product definition data control is a core element of the program. Figure 1 depicts Aras' digital transformation vision.

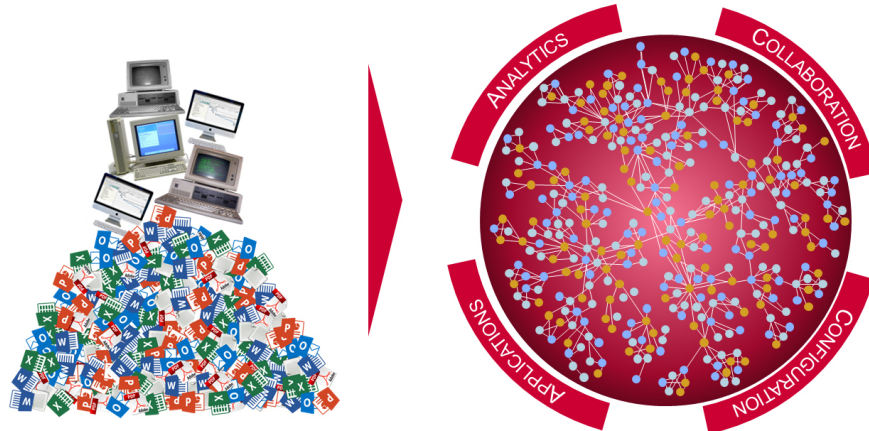


Figure 1—Digital Transformation is Much More than Just Digital Data
(Courtesy of Aras Corp.)

Mr. McAveney gave examples of what Aras is building—a more complete, advanced, usable, personable, and connected product innovation platform. He believes PLM solutions are far from complete, and there is still much work to be done. The examples he gave regarding what Aras is building are impressive and will serve their customers well. Some of the more interesting solutions include: system architecture solution, simulation process management, innovation management, task focused applications, document & procedure modeling, and semantic technologies.

Systems Engineering

Aras has been working for the past several years with partners such as IBM, No Magic, Big Lever, and Dr. Martin Eigner to understand the data and process requirements that will enable the integration of requirements and digital system architecture design tools that model the conceptual functional, logical, and physical aspects of a system (RFLP) with the detailed physical design BOM type data that is typically managed in a PLM solution such as the Aras Platform. The result of these development efforts is now taking shape in the form of a new System Architecture data model and application layer for integrating MBSE data and processes with PLM/PDM. Expected to be formally released later this year, this new application provides a high-level graphical representation of the system design from within the Aras Innovator GUI that bi-directionally connects with and manages the systems design information that is authored in external tools such as IBM DOORS, No Magic Magic Draw or even MS Excel spreadsheets. At the same time, systems engineers can have continuous access to the latest detailed physical BOM/parts information that is available for use in the system design activity. Since many systems are variants of previous designs with a large number of carryover physical components, this enables the systems architect to leverage “approved” design data at a finer level of granularity for use in conceptual trade studies to define the optimal physical aspects and costs of the conceptual design.

In addition, design engineers and managers, as well as supply chain partners who are not familiar with requirements engineering or systems engineering tools and modeling languages such as SysML, can visually understand and collaborate with systems engineers through a “single source of truth” system architecture model that takes advantage of all the core services of the Aras platform (i.e., multi CAD visualization, change management, configuration management, roles/data access/permissions, requirements management, etc.). CIMdata expects that this new approach to integrating the currently disconnected engineering silos within the SE, PDM, and ALM domains via this Innovator Systems Architecture functionality will be a major step forward in enabling the emerging Digital Thread vision for Aras customers.

Many New Faces

Last year, Aras received \$40M in funding primarily from Silver Lake and GE Ventures. This has enabled them to hire a significant number of people to accelerate their growth. They have increased headcount 50% across the board and doubled the size of Mr. Sperling’s product management group. At Aras, a product manager role is complex, in addition to specifying applications, they need to specify the underlying services that are flexible enough to be used across the platform in potentially unique and unanticipated ways. They also need to create specifications for the automated test suite that can test the services to ensure they will meet all solution development challenges. In CIMdata’s discussion with members of the product management team, they described this as one of their biggest challenges.

Conclusion

The Aras ACE conferences have grown in size and complexity every year, and 2018 was no exception. Large customers such as BMW, Audi, Schaeffler, and Microsoft delivered interesting presentations on the progress they have made on their digital transformations using the Aras solution.

The Aras Platform continues to grow and appears to be meeting the scalability claims promoted by Aras. The automated upgrade process included within the subscription works as advertised. The large, sophisticated, mature companies choosing Aras for their PLM needs certainly is expanding Aras’ credibility, bringing in new customers, and validating the selection choice made by earlier adopters.

CIMdata has been following and engaging with Aras from its inception in 2000. It has been a long process for them to get recognized. They have continued to develop their technology and it is still innovative while well proven. They are an exciting company to watch within the PLM space, and as always, CIMdata is looking forward to seeing Aras’ next move.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise’s ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata’s services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.