

Platform Success with Aras Innovator

CIMdata Commentary

Key takeaways:

- *Ensuring that the use of enterprise data, especially product data, is optimized to maximize innovation and profit, while at the same time delighting customers, is a never-ending challenge.*
- *Platform strategies are the best practice approach for products and for the enterprise solutions used to bring those products to market.*
- *Aras Innovator was conceived and built as a platform. Its service-oriented architecture has been proven over many years and manufacturers are seeing the benefits it promises and believe it will be a long-term sustainable solution.*
- *CIMdata recently discussed the platform journey with 9 manufacturing companies to better understand the benefits of a platform approach and how they are breaking through the dogma of "Only Out of The Box" (OOTB) and "Customization Not Allowed" while still achieving the benefits of digital transformation.*
- *All the interviewees spoke highly of Aras, were satisfied with what they achieved, and would make the same decision again.*

Introduction

A [product innovation platform](#)¹ is a set of functional domains—lifecycle stages and disciplines (e.g., system ideation, profitability management, and quality and compliance) that support all product-related disciplines through the entire product lifecycle. These are orchestrated by the product innovation platform with a “system of systems” approach that, in essence, makes a product innovation platform a fundamental support for the next generation of PLM-enabling solutions needed to develop, produce, and support products. An effective platform optimizes across the multiple functional domains from a product’s conception through its entire life.²

CIMdata has [published](#) extensively on the topic of platforms, especially the product innovation platform.³ We chose to develop this definition as part of our mission to drive PLM forward, and it is helping move PLM solutions from IT-oriented technologies and toolkits into business solutions that enable innovation and maximize profit, while improving user satisfaction and delighting customers.⁴

Platforms are used across many domains from automobiles to vaccines, and especially in creating IT infrastructure and software products. Getting the various platforms, tools, and solutions deployed in an enterprise to function as an end-to-end business platform is a complex, never-ending process. This is largely due to regular changes in all the different requirements that drive a company, as well as the general environment in which businesses operate.

At CIMdata, we are passionate about the product lifecycle—how products are conceived, produced, operated, maintained, and retired and/or recycled. We often hear of companies

¹ <https://www.cimdata.com/en/resources/complimentary-reports-research/position-papers/item/8484-product-innovation-platforms-definition-their-role-in-the-enterprise-and-their-long-term-viability-position-paper>

² <https://www.cimdata.com/en/resources/about-plm/cimdata-plm-glossary>

³ <https://www.cimdata.com/en/resources/about-plm/a-cimdata-dossier-plm-platformization>

⁴ Research for this commentary was partially supported by Aras.

executing digital transformation programs. We are sometimes astonished to hear that PLM is out of scope for those projects. It's hard to imagine that anything not related to the product can have as large a transformational result on any business. While the core of CIMdata's business is helping management develop strategies around PLM, we often end up educating executives on what PLM is. Many are quite surprised to hear the scope of what PLM covers and how it can directly impact their business—its top, as well as its bottom line.

Certainly [PLM is often hard](#).⁵ Older technology may require lots of customization to fit into the PLM strategy. Getting users to adopt new process changes when the existing user interface is less than friendly, if not hostile, requires a lot of effort. The difficulties with older enabling technologies are not unique to PLM, most enterprise solutions have similar issues and require extensive customization. In a public presentation by Ford, they summarized the competing drivers of the make vs. buy software discussion as:

- The need to keep business processes proprietary drives us toward developing software in-house.
- We have specific processes that providers of commercially available off-the-shelf (COTS) solutions don't address.

The desire is to be able to leverage COTS capabilities and keep proprietary knowledge in-house, while being able to upgrade to the latest versions of the COTS platform in a timely and low-cost way. This can be accomplished with a solution that meets high-level abilities to:

- Create templates and custom libraries to implement business processes and enforce process discipline.
- Stay in sync with commercial releases.
- Layer in the business processes in a tool agnostic manner.
- Avoid having multiple versions deployed at the same time.

CIMdata evaluated Aras Innovator against our Product Innovation Platform model.⁶ We found it to meet our expectations for supporting the purpose of a Product Innovation Platform and ranks extremely high across CIMdata's comprehensive criteria.

Research Results

For this research CIMdata arranged interviews with nine Aras subscribers. We sent questions to the subscribers, then had a phone interview to discuss their responses. The companies and what they have done with Aras Innovator were diverse. Production usage ranged from three to ten years in the automotive, industrial, electronics, and medical device industries. User counts ranged from 300 to over 10,000 active users, a couple were single sites, and several were global. The companies were headquartered in the US, Europe, and Japan. Many of the companies are well-known brands, but most wanted to stay anonymous because it was too hard to get responses approved by legal departments.

While CIMdata knows Aras well, we wanted to get a users' perspective on our hypothesis that Aras is different from other PLM mindshare leaders in that they promote customization. This is because with the Aras solution, extreme configurability allows users to achieve custom results but doesn't inhibit upgradeability. We wanted to understand what users were using Aras for,

⁵ <https://www.cimdata.com/en/resources/complimentary-reports-research/position-papers/item/13455-why-is-plm-often-so-hard-simple-is-best-position-paper>

⁶ <https://www.cimdata.com/en/news/item/8806-cimdata-publishes-ebook-product-innovation-platform-assessment>

how well it met the upgradeability promise, and what was the level of subscriber satisfaction. To test the hypothesis, we asked the following open-ended questions:

1. Please describe why you chose Aras Innovator.
2. Can you describe any unique or innovative aspects of your Aras Innovator deployment?
3. What benefits have you achieved with Aras Innovator that you were not able to achieve previously?
4. Getting to operating at scale in production is difficult, can you share any roadblocks you faced and the remedies?
5. What surprised you most about Aras Innovator after your selection?

Survey Results

Please describe why you chose Aras Innovator.

All the respondents were experienced PLM users. They had a wide variety of commercial and custom solutions prior to configuring and putting Aras Innovator into production. Frustration with the legacy solution providers was mentioned by several companies. The frustration was sometimes related to the lack of capabilities and/or the inability to migrate to a newer version due to customization. The biggest positive reason given was the adaptability of the Aras PLM platform. It has out of the box (OOTB) applications that can be extensively configured, provides open access to a complete data modeling and application development environment that is used to build custom applications, and can integrate with siloed solutions, all of which can be upgraded at no additional cost and with minimal risk or concern with regard to future usability. The subscription business model was also mentioned as a positive factor. Aras's approach of including all capabilities within the subscription made developing and deploying solutions simpler⁷.

CIMdata's view

The adaptability of Aras innovator and Aras' business model are critical to the respondents' success.

Can you describe any unique or innovative aspects of your Aras Innovator deployment?

The respondents had varied backgrounds, some were IT or development focused, and others were more business focused, so the answers to this question were quite diverse. Several respondents commented on software development-oriented activities ranging from being able to use lower skilled developers, agile methodology, and replacing the Aras user interface and forms with a commercial JavaScript environment. Others did more traditional Aras custom application building to support business functions such as RFQ and sourcing management. Another was operating at a large scale—with over ten thousand active users and eighty applications—integrated into an enterprise change management solution.

An implementation organized around building a digital twin seemed unique as it was focused on a very data-centric implementation approach. Finally, a conglomerate that adopted Aras Innovator at the corporate level supported multiple divisions using a SaaS approach. Each division was able to configure their own instance while leveraging a corporate center of excellence.

⁷ Integrations to external applications such as CAD are extra cost.

CIMdata's view

No one is running Aras Innovator OOTB and the extent of configuration ranges from minimal to extensive. A key feature that enabled this was the confidence that they would be able to upgrade without additional cost. As one long-time user said, we can “customize without regret.”

What benefits have you achieved with Aras Innovator that you were not able to achieve previously?

Like the previous questions, the answers depended on the role of the person answering. The business-oriented respondents focused on data and process management, noting the following three points:

- Able to deploy a fully integrated change process, at scale.
- We can keep our processes and data model current.
- We can fully connect our data, no more Microsoft Excel “databases.”

Several others noted the simplicity and uniqueness of the upgrade process with Aras' subscription business model. The concept of every user getting access to every capability without having to subscribe to different modules was a game changer for many. Getting funding to scale user counts when a demo, or even product-ready solution can be demonstrated, is much easier than pitching a concept to get funding to develop a prototype.

CIMdata's view

The respondents reported many different successes based on their challenges. Aras Innovator's capabilities and Aras' business model, eased development and deployment, as well as reduced risk, making it easier to be successful.

Getting to operating at scale in production is difficult, can you share any roadblocks you faced and the remedies?

Several respondents claimed to have no significant issues. “Difficult” was not defined, but getting that response multiple times in a such a small sample was notable. For those that did experience scaling issues, the issues tended to have technical solutions, which included upgrading the Aras software to get better performance, as well as using distributed vaulting and multiple application servers. One respondent did note that eliminating the use of Microsoft Excel which reduced process and data complexity made it easier to support their ten percent per year headcount growth.

An important point brought up was that even though it was easy to get Aras applications developed quickly, one still needs to write good code. Another noted that very complex system configuration and security settings can degrade the response, and their remedy was to execute SQL statements directly, which can have security implications. The business focused respondents noted that finding a system integrator to work with has been difficult, so they developed an internal team as the remedy. Another noted that eleven different ERP solutions made integration a scaling issue.

CIMdata's view

Scaling issues often occur when the user count gets large and/or multiple sites get added, and very often when sites are added in other countries around the globe. Most interviewees, and others using non-Aras solutions that we have talked with in the past, also have scaling challenges. What Aras does, is to work through issues as well as any tool solution provider.

What surprised you most about Aras Innovator after your selection?

The Aras users CIMdata spoke with were satisfied. They felt well treated and well supported even as Aras has grown significantly. We were a bit surprised that one respondent was not aware of Aras' upgrade policy related to customized configurations, this is usually well understood, but this person may not have been involved with the selection process. Another, from a medium-sized manufacturing organization, noted that their three developers could output more functionality in a release than users could absorb, not a common response in CIMdata's experience. On the negative side, reporting is still an issue, while Aras' self-service reporting is useful, it is still far from meeting enterprise needs, but this respondent also noted that the issue also exists with many of their other solutions provided by other companies.

CIMdata's view

We still see the included upgrades for custom configured solutions as a major differentiator. We are curious to see how Aras reporting evolves as their subscribers expand their implementations across the lifecycle making data more accessible under the single, logical source of the truth.

Conclusion

CIMdata would like to thank Aras and especially the subscribers who participated in this research. With this type of input, everyone within the PLM economy learns and has the opportunity to become more innovative and effective. The respondents are all making good use of the Aras solution and are making headway on their digital transformation journeys. The technology available within the Aras PLM Platform delivers a robust technology baseline and through minimal to extensive configuration, Aras customers are able to deliver value to their organizations while not being left with a legacy solution. All respondents said they were happy and would choose Aras again. Companies interested in digital transformation should be sure to include Aras Innovator on their shortlist.

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.