

From Digital Trauma to Digital Nirvana

CIMdata Commentary

Key takeaways:

- Enterprise IT solution implementations, including PLM, have a history of failure and lack of delivering promised value, often inflicting trauma on organizations, leadership, and users.
- While every solution promises nirvana—the solution or product will solve all the problems and bring fame and fortune to those involved—few deliver anything close.
- Data transparency, business process adaptability, modern solutions, and upgradeable, easy customizations are building blocks that help companies successfully alleviate digital trauma and achieve digital nirvana.
- Aras Enterprise SaaS is a product innovation platform that contains the necessary building blocks to help companies achieve digital nirvana.

Introduction

Much has been written over the years about the difficulties companies have with IT solution implementation, especially enterprise projects that seek to transform the company or major parts of it. PLM and digital transformation initiatives are also susceptible to these issues. This digital traumatization has several causes, some internal to companies, some external.¹

The external traumatizers include rapidly evolving, converging, and emerging technologies, as well as pressures from customers, competitors, and regulators. The internal traumatizers are more frustrating as companies theoretically have control over them unlike the external traumatizers. Internal traumatizers fall

Definitions

Nirvana: noun, An ideal condition of reset, harmony, stability, or joy.²

Digital Nirvana: noun, An IT solution that enables businesses to make fast, accurate, data-driven decisions. The solution can be easily changed and updated as the internal and external company drivers evolve. These solutions typically display a high degree of transparency or unobtrusiveness.

Internal traumatizers fall under the common people, process, and technology categories. At CIMdata we talk to many solutions providers and industrial companies, and we are always amazed at the companies with many obvious issues that don't see themselves as traumatized; they see the problems as business as usual. Perhaps its organizational Stockholm Syndrome.³

Achieving Digital Nirvana

The reality is digital traumatization is solvable and digital nirvana can be approached if not fully reached. The way to solve the issues causing digital trauma is to develop a holistic plan that identifies business issues then details the vision, strategy, scope, roadmap, implementation plan, and appropriate organizational adjustments required to address those issues.

To achieve digital nirvana and get to fast accurate data-driven decisions, several critical elements are required:

¹ Research for this commentary was partially supported by Aras Corp

² <https://www.wordnik.com/words/nirvana>

³ https://en.wikipedia.org/wiki/Stockholm_syndrome

Element	Description
Modern Technology	Modern technology must provide critical capabilities needed to optimally operate a business, as we've described in other publications. ⁴ The current state-of-the-art product innovation platforms run natively on the cloud often with SaaS licensing and delivery. By leveraging services provided by hyperscalers such as AWS and Microsoft Azure applications become highly scalable, resilient, and performant at a reasonable cost.
Adaptability	Ability to configure or customize a solution to align with business processes make the solution easy for people to understand, use, and evolve as the company requires.
Upgradeability	The solution implementation's ability to easily be updated to use a newer version of a solution including all of its configurations and customizations.
Data Transparency	Data transparency, a subset of openness, is the characteristic of data being used with integrity, lawfully, fairly, and traceably, for valid purposes. Individuals and businesses should know what data is being collected, from whom, who can access it, how it's being used, and how they can interact with it. ⁵

Once a project plan is defined, it must be executed effectively. Today, some form of the Agile methodology is the most common approach to project execution. Using an agile approach enables the implementation team to adapt as change happens. As Mike Tyson said, “everyone has a plan until they get punched in the mouth.” Implementations will “get punched in the mouth” often. New requirements arise, technology doesn’t work as planned, people will change their minds, and many other obstructions and barriers will be encountered. The project team implementing the solution will need to adapt, and they need the proper tools, processes, and leadership support to be successful.

Aras Enterprise SaaS

Over the past few years Aras has been hard at work transforming their product innovation platform, Aras Innovator, into a state-of-the-art cloud-based SaaS-delivered solution. Aras Innovator was known for its flexibility, scalability, and upgradeability, and received high rankings in a platform evaluation CIMdata performed several years ago.⁶ CIMdata found the Aras solution to have excellent digital thread support enabled by its pervasive low-code capabilities. It comes with adaptable out-of-the-box (OOTB) applications. The extensive configurability enabled by the solution’s native low-code capability ensures that the OOTB applications and solutions built from scratch can be adapted to meet customer requirements yet are upgradable independent of how much configuration has been performed. In recent years, Aras has extended their platform to include Model-Based System Engineering (MBSE) support, visualization, MRO, and much more.

⁴ <https://www.cimdata.com/en/resources/complimentary-reports-research/position-papers/item/3817-the-next-step-in-plm-s-evolution-its-platformization-position-paper>

⁵ <https://www.gatekeeperhq.com/glossary/data-transparency>

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

CIMdata defines a Generation 2 cloud solution as one that has the configurability of an on-premises solution supporting the full breadth and depth of PLM requirements, and the ability to leverage cloud resources and capabilities such as elasticity natively. Aras Enterprise SaaS is an example of a Generation 2 cloud solution.

In addition to supporting the basic Generation 2 requirements, Aras Enterprise SaaS supports two advanced requirements OOTB. First, the solution is 100% compatible with the on-premises version. A highly configured on-premises installation can be copied to the cloud and run. This enables developers to work in local environments and push their updates to the cloud confident there won't be any surprises caused by infrastructure variations. Aras Enterprise SaaS also supports hybrid implementations with capabilities split between on-premises and the cloud. The second advanced capability to impress CIMdata is the inclusion of a DevOps environment with the SaaS product.

In most companies PLM solutions are always configured and often customized due to the complex requirements that must be supported to realize products. Managing complex PLM configurations and customizations requires configuration control just like products produced by users of PLM. DevOps is the state-of-the-art way to manage cloud solution configurations, that are often created by custom implementations. A DevOps environment requires a whole series of solutions to define, code, test, and deploy software. Aras Enterprise SaaS includes this toolchain OOTB, ensuring that customers properly manage the configuration of their PLM solution.

Conclusion

The organizational trauma caused by poor IT solutions is well recognized and understood. It makes it difficult for companies to compete, maximize their return on investment, and ensure customer satisfaction. What companies want is to get their jobs done at digital speed without having to think about the idiosyncrasies of software and its deployment. They want data transparency, and software that easily adapts to their changing requirements without development or upgrade pain. This is digital nirvana.

Aras Enterprise SaaS is a product innovation platform built on a Generation 2 cloud architecture. It delivers all the capabilities Aras is known for with the added benefits of the cloud. Companies evaluating moving their PLM solutions to the cloud should evaluate Aras' Enterprise SaaS solution, it meets Generation 2 requirements while maintaining 100% compatibility with their on-premises solution. Aras's commitment to compatibility preserves investments made by existing customers and should give new customers and prospects confidence that Aras is a great choice for a PLM SaaS partner.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design, deliver, and support innovative products and services by identifying and implementing appropriate digital initiatives. For nearly forty years, CIMdata has provided industrial organizations and providers of technologies and services with world-class knowledge, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) solutions and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit www.CIMdata.com or email info@CIMdata.com.