

Product Data Intelligence

CIMdata Commentary

Key takeaways:

- *Actify's solutions enrich and complement existing enterprise environments, such as PLM and ERP, by bridging information silos to provide informed analysis of disparate data, providing product data intelligence.*
- *The Actify suite works both within enterprise environments and as a standalone solution that provides an intelligent, visual-based view into product information.*
- *The solutions are deployed as a service and priced by the size of the user community.*

Common Data Intelligence Issues

Discrete manufacturers of all sizes share a data problem: How to maximize value from all of the information that is available about products and services? This issue manifests itself throughout product lifecycles: during the product innovation process as well as after products are placed in service.

Sharing product data in the enterprise in meaningful ways that unlock insight and support collaboration, efficiencies, and cost reduction is critical to expanding data's worth. The more that data is shared and reused, the more value is extracted from it and the higher the benefits for companies such as being faster, better, and cheaper at producing products. However, many barriers to sharing information exist because companies have created siloed data sources that are difficult to find and access.

What organizations want is to be able to have easy, shared access to information without replacing their current product data sources and systems, and complimentary to existing PLM and other enterprise solutions. This requires flexible integrated access across current environments of solutions and data stores.

The bottom line is that organizations, regardless of size, have a massive data opportunity that remains unfulfilled. An opportunity that can be resolved by systematic and effective use and dissemination of product data intelligence—that will unlock significant operational benefits. CIMdata believes that a good solution will reinforce competitive advantages and that having only a 'good enough' approach to PLM solutions will result in unnecessary problems, lack of user adoption for the more complex technologies, and minimize the potential benefits.

What Companies Need

Companies create product information in a number of forms: CAD models, drawings, documents, analysis results, specifications, and many others. When the product data can't be viewed in the context of the product design, then it becomes very difficult to understand it properly and extract intelligence from it. Thus, it is imperative to have a way of viewing and examining data in the richest context possible—visually, directly associated with the components of the product's design. That is, using the CAD models and drawings as the context for viewing and navigating through the data.

Nothing can be leveraged, collaboratively or individually, if it can't be readily found. So, product information needs to be accessible from wherever in the organization it is stored and managed. This is the typical role of product data management (PDM) solutions, but not every product development organization has a PDM, or they have one that is not fully adopted by users, or

they have several across which the data is not linked and synchronized. More likely, in CIMdata’s experience, product information storage is done inconsistently, with lots of data residing in disparate repositories and shared folders. Thus, proper, consistent access to information can be a burden for many organizations. Establishing and managing a single data repository, while a fine goal, requires substantial resources that an organization may not possess. However, the need for consistent access does not diminish just because the “best” solution is not easily attained. It remains a fact that you can’t collaborate on what you can’t find. Given this, having tools that help access, view, and manage information gathered from across the enterprise is essential.

Another major problem for organizations is how to present information in ways that make it easy to understand and that are tailored to the particular needs of the recipients. The solution is to have straightforward and easy ways to generate reports from the disparate data sources mentioned above. To do this, users have to be able to search and sort data to find what they need to report on, and they have to have a way to build repeatable as well as ad-hoc reports that can automatically be populated with data of interest. It is important that reports remain linked to their data sources so that as data changes throughout the product lifecycle, the reports can be regenerated without the burden of manually re-discovering the current state of the data contained in the reports.

Actify provides a suite of solutions that are targeted at helping companies mitigate the issues described above.

The Actify Solution Suite

The Actify offering is built on a product data platform that they call Centro. Centro provides the main aspects that CIMdata expects to find in a product data intelligence platform—that is, data and process management, data aggregation from multiple sources, data linking, attributes and metadata capture, search and find mechanisms, data visualization, integration of applications and data sources, reporting, security, and administration. Figure 1 illustrates the Actify Centro platform and surrounding capabilities in the Actify solution.



Figure 1—The Actify Solution Platform
(Courtesy of Actify)

There are several tools in the suite, as shown in Figure 2. Tools that integrate information silos, automate mundane processes, are easy to use for periodic users, and enable innovation through user collaboration and more effective use of data. They provide scalable solutions that support:

- Enterprise CAD viewing (2D, 3D, lightweight)

- File sharing
- File and data management
- Data discovery
- Business tools for analytics and reporting
- Product data intelligence



Figure 2—The Actify Solution Landscape
(Courtesy of Actify)

Their original product, SpinFire (including SpinFire Web), is based on the Centro platform and provides visualization and reviewing of 2D and 3D CAD and related information.

Actify provides bespoke dashboards for dynamic reporting. Reports are customizable to support the unique requirements and process of each user. Data can be reported against the viewable geometry as well as in tabulated reports. All reports can be viewed on-screen or printed.

Pipeline Manager monitors information in the context of processes and automates tasks. It controls changes and provides notifications of activities requiring action or that have been completed. Users can subscribe to processes and data, so they automatically are notified when changes occur. Process definitions can apply business rules to data to assure it is developed in appropriate ways.

Data synching across processes and data in applications provides essential linking that helps users find information related to other data, such as finding the process that was used to create a particular data item, or finding manufacturing information for a part or assembly.

Much like other PDM solutions, Actify has a distributed architecture that provides local storage with global access based on a central catalog of the data. Users enter the data repositories' catalog to find the information or file they are looking for and it is delivered to them regardless of the location in which the data is stored.

Actify's primary products are:

- SpinFire—a 3D and 2D data viewer that allows users to see and investigate models, drawings, and documents regardless of what solution in which the information was developed. SpinFire can access data from all the popular CAD systems.
- Centro—provides enterprise data management. It stores information about where data is stored and who can access it. It allows users to search data by attributes and 3D model shape search. Centro provides a centralized data viewing platform on which end-user capabilities are built.
- Actify business tools—provides reporting, data mash-ups, visual data delivery analytics, and other report generation capabilities.

Actify provides its products as SaaS (Software as a Service) so deployments should be both rapid to achieve and flexible to configure.

Conclusions

Actify has been in the information discovery and visualization business for many years. They continue to enrich and add to their suite of tools and processes to enhance how people extract intelligence from their product data regardless of the data's source. Their solutions' abilities to coexist in and augment the enterprise environments of their customers are strong and compelling reasons to consider their solutions to support being able to improve product data intelligence. Actify's pricing model that provides solutions as a service is also quite compelling. CIMdata believes that organizations who are trying to extract more information from their data should consider Actify as a solution provider.

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.