

Titania Content Delivery Platform

Oberon Technologies' Dynamic Content Delivery Platform Enables Digital Transformation

Key Takeaways

Product-related content comes in many forms that are both authored and derived, including product manuals, service bulletins, parts catalogs, marketing materials, training content in various formats, and many other types of content.

Ensuring that product-related content is accurate, up-to-date, and available to consumers is complex, due to how that information is created and managed, and the wide variety of data repositories that house it.

Content delivery systems provide end users with seamless access to information managed in disparate repositories including PLM, ERP, file systems, content management systems, and other enterprise applications.

Titania Delivery, the content distribution component of Oberon Technologies' product portfolio, is a SaaS platform designed to assemble and distribute content from complex enterprise landscapes at scale.

Titania's effective delivery of product-related information is critical to improving customer satisfaction, improving service technician efficiency, and effective customer retention.

Introduction

Delivering even simple manufactured products to market is a complex process. While product development focuses on design, manufacturing focuses on production, and finance focuses on profitability, there are hundreds, if not thousands, of details that need to be resolved for a successful launch and ongoing production.¹ An old phrase is still very relevant to the product lifecycle—"the job is not finished until the paperwork is done." Paperwork, or product-related content, whether documentation for customers, suppliers, or internal company usage, is a requirement for success and often for regulatory approval. Without regulatory approval, many products cannot be sold.

Getting the product designed and produced is job one. But, to successfully launch and deliver a product to market profitably, product content, such as specifications, service bulletins, parts catalogs, marketing materials, and training content, must be accurate, up-to-date, and available to the appropriate consumers when they need it and on the desired device. Furthermore, the perception of products and customer

¹ Research for this commentary was partially supported by Oberon Technologies

satisfaction are often dramatically impacted by easily accessible and available product use and service information.

Product developers, technical writers, marketing copy developers, and many others create content that aligns with product configurations. Customers and information consumers can make poor decisions and get frustrated when information is not synchronized. We've all had products where the manual or instructions didn't align with the product purchased, such as describing a feature that was not included in the product or had wrong part numbers. Sometimes this is planned, in that the content is treated as generic to cover multiple variants; sometimes the content didn't get updated when the product changed. In most cases, it's an annoyance for a customer, but in regulated industries like healthcare, products cannot be sold or are recalled, and, in the worst-case scenarios, threaten patient lives.

Oberon Technologies and the Titania Platform

Oberon Technologies (Oberon), located in Ann Arbor, MI, was founded in 2007 to help companies create and deliver product and service information. Products include content authoring, content delivery, and VR training experiences. Additionally, they provide services including implementation of their products, solution consulting, and systems integration. They have a suite of partners they work with to support their customers, including Adobe, AWS, Bluestream, MasterControl, RWS, and PTC. CIMdata previously wrote about [Oberon's Web Collaboration Suite](#), the content authoring portion of the platform.

Oberon's Titania platform supports the entire lifecycle of content creation, management, and distribution. In this commentary, we focus on their platform's delivery and access elements. Titania Delivery is a hosted solution available on AWS and AWSGovCloud, with off-line options. It is designed to be scalable and support secure, dynamic content delivery. As with any good platform, integration capabilities are critical, and Titania is able to consume content in a wide variety of formats from many different repositories, including databases, content management solutions (CMS), PDM/PLM, Learning Management Systems (LMS), file shares, and other enterprise applications.

Once data is uploaded from its source repository(s), Titania's portals control user access, allows flexible branding, and enable mashups of content from multiple sources. One key capability customers described to CIMdata was the ability to quickly and easily create portals for data consumption. Portals can be used within a company via its intranet, on GovCloud, or be exposed on the public internet via the company or partners' websites or portals. Consolidated data is also accessible via API for enterprise application integration. Figure 1 shows this architecture.

Titania Platform Approach

Enterprise landscapes are evolving to a system of systems approach based on interconnected platforms. While every solution provider today seems to offer a platform, many are just applications that fit within another major platform such as PLM, ERP, CRM, cloud infrastructure, etc. Content delivery is a horizontal service that makes sense to position as a platform.

While the Titania platform is a complete, end-to-end solution it is still possible to use it to address focused problems cost effectively and an extensive digital transformation is not required to get business benefits. Often customers start small and grow incrementally into an enterprise-wide solution.

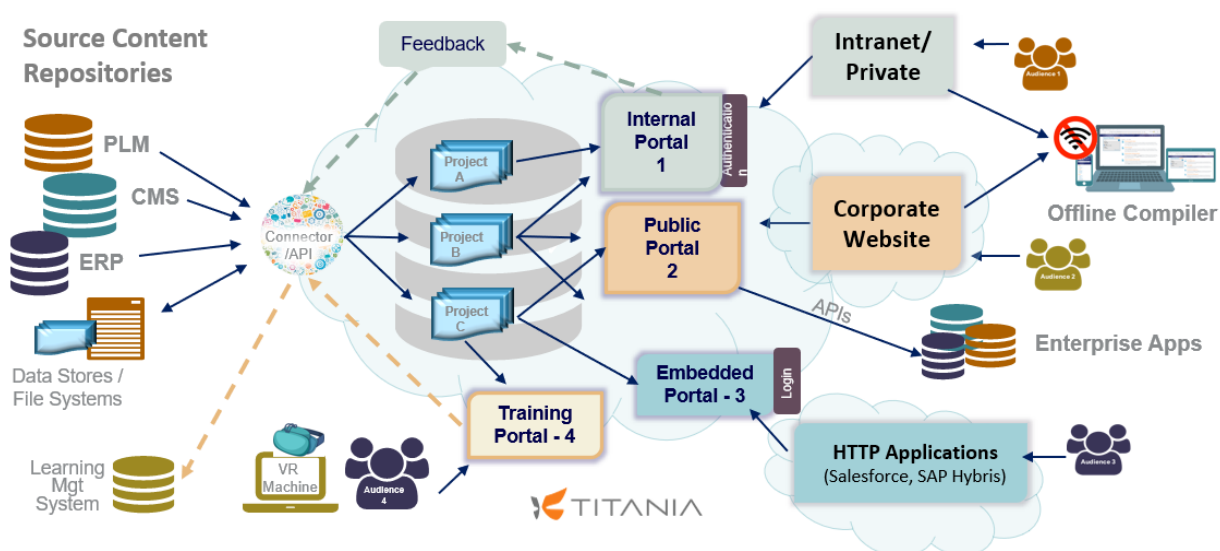


Figure 1—Oberon Technologies' Titania Platform

A key differentiator of Titania is that it understands product structure and structured content (XML). When building content that is connected to product structure elements, such as bills of material (BOMs), Titania can intelligently extract metadata along with content to create a variant or serial number-specific document. For example, service documentation matches exactly the as shipped and even as-maintained products. Product attributes and metadata can be included, enabling richer, more complete documents to be delivered. Beyond just structure, Titania also understands lifecycle states of the source content, so pre-released documentation can be as accurate as possible.

What is a Portal?

In the context of Titania, a portal is an access point for curated data. The portal administrator environment enables users to configure access that meets their needs. Theme style sheets are used to define the look and feel of the portal. Embedded widgets allow data sorting, filtering, and manipulation, including downloading feedback and analytics data to Excel and other common formats.

Content Delivery is Part of Digital Transformation

Digital transformation is a significant trend that CIMdata supports within its industrial consulting practice. The digitalization of data makes it more usable, reusable, and actionable. The benefits are realized by eliminating data silos via integrations that improve the flow of data and enable flexibility in how information is consumed. With flexible consumption options, end users can better leverage data to improve decisions that lead to reduced product cost and greater quality, speed to market, and innovation.

Digital transformation programs often get tangled up in technology selection and implementation, losing focus on the consumer of data. This is especially true with authoring tools, as well as the underlying data and process management platform. The consumption of data is where value is realized, and its implementation happens in the later program phases, after transformation fatigue sets in. A critical element of a digital transformation program is to deliver significant, visible business value early and often. This improves the ROI and gains support for the program from users and executives.

Titania supports many content or information delivery use cases. Given its flexibility to consume multiple, diverse data sources, it can be used to create portals leveraging legacy data sources prior to the full digital transformation, thus gaining early support from management. The data sources can be swapped as the digital transformation elements are deployed.

Taking this approach enables programs to get value to the organization in a faster, more incremental way. Use cases supported include:

- Product Documentation—Owner’s Manuals, Work Instructions, Test Procedures
- Marketing/HR—New Product Introductions, Recruiting, Standard Operating Procedures
- Field Service—Product/Part Catalogs, Installation, Maintenance, & Repair Procedures
- Knowledge Base—Customer Support Library, Field Service Technical Notes
- Training Information—Safety Training, Field Service Training

Within an enterprise there are almost infinite applications for content distribution. Titania’s support of virtual reality content is exciting, as hardware and software technology are approaching a tipping point within the enterprise. CIMdata expects this to become very important, especially in field service.

Customer Comments

CIMdata talked with several Titania customers and received positive feedback on both the product and the support provided. Portal creation was noted as an important feature and used to create custom actionable mashups of data without IT support or external development resources. In one case the customer noted that the multi-lingual translation feature reduced translation costs by over 40% due to increased process efficiency.

Conclusion

Delivering a product to customers requires much more than just the physical product. Written and derived content includes product manuals, service bulletins, parts catalogs, troubleshooting knowledgebases, marketing materials, training content, and a myriad of other information. Customers, employees, partners, and sub-contractors all need access to content. Ensuring they get access to accurate content easily is critical to any company producing products. The challenge arises from data being stored in multiple repositories, distributed across an enterprise’s IT landscape.

Titania, the content delivery platform from Oberon Technologies, is designed to capture, manage, and deliver content at scale. This platform and related services provided by Oberon and their partners enable companies to assemble, manage, and deliver content effectively, improving customer satisfaction. Companies needing to improve content delivery or address the full end-to-end process should contact Oberon Technologies.

About CIMdata

CIMdata, a global strategic management consulting firm, provides services designed to maximize an enterprise’s ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics 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.