Capgemini’s Product Information Access Framework

CIMdata Commentary

Key takeaways:

- Capgemini offers a custom solution to access product information across disparate data managed repositories
- Metadata search capabilities leverage Dassault Systèmes’ EXALEAD solution

In order to fight increasing competition, industrial product companies allocate extensive time and budget to increase the productivity of their product development design process by installing the latest technology including up-to-date design software and strong computing IT infrastructures. Yet the “weak link” in the workflow of new product design—lack of effective search capabilities that enable part reuse—often goes ignored. Most product design companies maintain extensive repositories of released components and subassemblies that if reused in their current new product development can dramatically reduce time and cost. Capgemini¹, the consulting, technology, and outsourcing services company, offers their clients support for an effective metadata search across multiple, data-managed repositories. CIMdata views this capability as a strong positive for industrial companies who often have to work in a multi-provider solution environment.

Today, industrial product companies can find themselves developing products jointly with teams of designers either from partner companies or across multiple divisions within their own company which were obtained through acquisition. Those partnering organizations likely employ different PLM solutions and manage their data repositories with different data management solutions. Each will have different search capabilities and employ very different user interfaces, compounding the challenge of searching across multiple repositories. Because of those inherent complexities, designers often limit their search efforts or spend an inordinate amount of time and effort accessing only the deployed solutions with which they already work, ignoring information in other PLM and ERP repositories.

Figure 1: Architecture of Capgemini’s Product Information Access Framework
(Courtesy of Capgemini)

¹ See www.capgemini.com.
Recognizing this weak link in the design workflow, Capgemini has developed adapters for the major market PLM and ERP offerings that allow search access within their data repositories. The adapters include access for Teamcenter from Siemens PLM Software, Windchill for PTC, and SAP ERP from SAP SE. The Capgemini architecture can also allow access to other customer applications and data sources. Capgemini has structured an implementation that uses the EXALEAD\textsuperscript{2} search capability together with the necessary adaptors (see Figure 1).

As a subsidiary product of Dassault Systèmes, EXALEAD already supports access to Dassault's data management solution, ENOVIA.

Capgemini is able to build a custom solution for a client based on their key parameter search needs that is architected to access any subset of the four primary data management solutions using a common user interface. Capgemini follows nine steps in scoping, designing, and implementing their Product Information Access Framework for an end user community:

1. Capgemini first works with the customer to understand their product information landscape and product information flow
2. Next, Capgemini defines single product information views to be created and identifies the attributes associated with these views
3. Capgemini works with the customer to understand the business rules and flow of critical attributes
4. At that point, Capgemini prepares the technical design of the implementation
5. Then configures CAD and other integrations to capture key critical attributes
6. Only then does Capgemini develop and configure data connectors and indexing in EXALEAD
7. Capgemini then configures the EXALEAD mash-up user interface which allows searches across the multiple data-managed repositories, without the need and complexity of learning and using different interfaces—working with the client, Capgemini refines the search reporting formats for ease of use
8. Extract and migrate sample data
9. Testing and Go-Live

CIMdata sees the common interface aspect of the implementation as an enabler for users, fostering its frequent use and agrees with Capgemini that the solution can form a backbone for a company’s customized analytics and business applications.

The product information access framework from Capgemini drives organizations towards greater discipline in product data management by standardizing data elements located across the plethora of sources and tools. The implementation of the framework reveals several opportunities for business process improvement and application rationalization thereby accelerating the digital transformation of the enterprise.

New product development is challenging in today’s competitive market. Industrial companies need to look at all aspects of the product development workflow for potential improvements.

\textsuperscript{2} EXALEAD is a search-based platform solution from Dassault Systèmes; \url{http://www.3ds.com/products-services/exalead/}
Often a win-win solution can be found where work productivity using a design tool is not just improved; work is eliminated by using a pre-existing solution. By having the proper search tools to identify and locate already released components that can be reused in the current in-development product companies gain the advantage of both time and money. For those companies who face the challenge of working across multiple, data-managed repositories, CIMdata believes they should investigate and consider the Capgemini solution. More information on Capgemini’s Product Information Access Framework can be found by contacting marketing.pes.in@capgemini.com.

About CIMdata

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