OPTIMIZE & REVIEW

CATIA PLM Express
CATIA - Knowledge Advisor

Enables design engineers to embed knowledge within the design and leverage it to reduce errors and automate design for maximum productivity

In today's competitive market, efficient decision making and accurate designs are the crucial elements of success. Because competition drives innovation, the product needs to generate the highest quality in the shortest amount of time.

Overview

CATIA - Knowledge Advisor allows designers and design engineers to capture their know-how and re-use it as best practices. Users can embed knowledge into their design through formulas, rules, reactions and checks. By accelerating the exploration of design alternatives with regard to rulesn, users makes better decisions and reach optimal, error-free designs quickly.

Customer Benefits

- Accelerates exploration of design alternatives to speed up design process and allocate more time for innovation
- Captures engineering knowledge of best practices
- Increases quality of designs by embedding corporate standards in design rules
- Captures and reuses the most important asset - the intellectual capital

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Key Capabilities

Captures and highlights engineering knowledge
via creation of rules, reactions, checks and formulas. This knowledge is directly embedded in the design through specifications. This allows users to take parameters into account earlier in the design process, automate repetitive, or time-consuming design tasks, and solve complex equations. Early attention to specification details improves design quality and reduces cost by eliminating unnecessary redesign cycles.

Editing and maintenance of Product Knowledge Templates
The management of captured knowledge is facilitated through the ability to edit and maintain templates in the same easy and intuitive, interactive way used to modify any CATIA part design. This requires no programming skill and allows templates to be easily adapted to the changing requirements of the organization, accommodating improved methodologies or changed legislative or customer requirements.

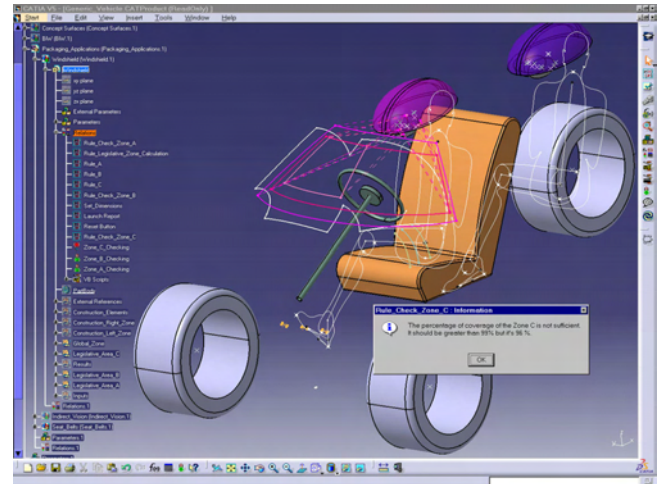**Product Knowledge Templates management**
Once defined, these intelligent, adaptive templates can be shared across the extended enterprise through catalogs. These templates can be as well managed within the Engineering Hub, through ENOVIA V5 VPM, giving users all the power of our PLM solution in terms of data management, collaboration and concurrent engineering. This facilitates standardization of design methodologies and capture of corporate knowledge capital, without the need for advanced programming skills. For reuse, a defined Product Knowledge Template offers the end user a single entity, with a predefined set of inputs, for maximum understanding and ease of use.

Scripting templates for a complete solution
CATIA Product Knowledge Templates provides a scripting language, enabling full design specification and generation. Using a simple and declarative language, the user can describe (in text format) geometric specifications, transformation and positioning specifications (including assembly constraints), and knowledge specifications. Moreover, to keep the creation of scripts simple, powerful Knowledge Templates can be used as any script objects.

Enable large deployment of User Define Feature
Thanks to the ability to modify the User Define Feature (UDF)

Screen capture of CATIA - Knowledge Advisor

reference that strengthens the continuous development process and enable opening and closing of UDF when instantiated, customer can securely create and deploy their UDF within their enterprise. The system keeps the ability to manage IP protection between OEM and supplier chain while preserving industrial usage within the company.

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