d1g1tal AGENDA

PDM EASY

The new board member of PDTec AG (Karlsruhe, Germany), Michael S. Murgai, takes time to answer d1g1tal AGENDA's questions about lightweight product data management.

Michael S. Murgai in conversation with the editorial team

Michael, you have just been looking for a partner in the Indian state of Maharasthra. You are very busy not only in this country, but also internationally. Your LinkedIn account speaks volumes about this[1]. What is the most succinct way to characterize CAD Portal provided by PDTec?

CAD Portal is a standardized solution for product data management that essentially focuses on daily engineering practice, such as project-related collaboration based on CAD data. Thanks to its software architecture and features, CAD Portal offers many advantages compared to complex PLM solutions. An example is the extremely short implementation time. Another example is the very intuitive user experience, so that the training requirements for users are significantly lower than for other comprehensive PLM solutions.

These are just two reasons why CAD Portal's total cost of ownership (TCO) is so attractive.

How's the acceptance of CAD Portal in the overall industry? Nationally? Internationally? And which installation is PDTec particularly proud of?

CAD Portal is always convincing when companies carry out project-related development activities, for example. A concrete example are companies with a special positioning, such as engineering service providers. The German engineering services provider Bertrandt is a very satisfied customer who uses CAD Portal for its internationally distributed development teams. EDAG, another huge leading services provider in Germany, also uses the PDM solution intensively for its development projects and engineering collaboration. Another example are large companies that want to carry out clearly defined projects flexibly and efficiently with system support – but at the same time want to keep the effort for onboarding employees low, so that project execution in the existing complex PLM system is not a feasible option. CAD Portal offers an interesting alternative here – for operation on-premises or in the cloud. Of course, a synchronization with the customer's PLM backbone is also possible.

Generally speaking, what challenges does the manufacturing industry face that CAD Portal can provide an answer to?

There are many. But above all it is the increasing complexity of the products and systems to be developed and manufactured. Mechatronics and systems engineering are important keywords here. Of course, this also has an impact on engineering processes. Additionally the increasing amount of embedded software raises the overall product complexity. Well-known consulting companies have been warning for some time that the overall complexity of industrial companies could get out of control. This is particularly true in the PLM domain, where the introduction of comprehensive data management faces too high costs and efforts. Many of the PLM solutions available today are grown, monolithic software packages whose complexity has reached a level that contradicts the desired efficiency in terms of costs and effort.

To what extent does CAD Portal differ from typical PLM systems?

CAD Portal is based on a standardized component architecture. In this context, the market research firm Gartner talks about 'Composable Applications', which describes PDTec's product strategy very aptly: With the selection and combination of specific apps and services, standard solutions are created for our customers, such as the CAD portal for product data management and SimData Manager for simulation management, or PDMconnect for connecting PDM/PLM systems and distributing engineering data, i.e. to suppliers. We are also currently working on a new, unique solution for technology data management. For the customer this means: Our component architecture is a modern, modular system architecture that is preconfigured and tailored to the customer's requirements. Thanks to the modular system architecture, our solutions may be expanded later by integrating additional apps and services.

Michael S. Murgai (front right in the front row) visiting the South Korean partner Raonx

An example would be helpful.

The connection between CAD Portal and PDMConnect is a practical example to prove the customers' security of investment thanks to our component architecture. Like a puzzle, additional apps and services can be fitted together if customer requirements increase. The combination of CAD Portal and PDMConnect enables the orchestration of internal collaboration, while PDMconnect can also be used to control the integration of external partners and suppliers – supported by innovative functionalities such as clash detection in the CAD domain. This allows our customers to implement consistent processes in their extended company.

Finally, give us some insight into PDTec's roadmap.

No software is perfect, so there is always and everywhere potential for expansion. Today, artificial intelligence (AI) and machine learning (ML) are particularly important enabler technologies that offer great potential – provided they are used correctly. AI/ML is currently often just a buzzword, with hardly any practical link to engineering. We are conducting intensive research into AI/ML scenarios, primarily to create process-related improvements. One example is supporting users in the engineering process itself, so that even less experienced users are better guided and can reach their goals faster and more efficiently. Another example is the use of AI/ML in data entry and validation, which increases data quality with little effort. This in turn is the basis for further AI or ML algorithms for additional optimization.

Thanks for your statements!
Interview: Bernhard D. Valnion