

Discrete Manufacturing

With its S/4 and Hana SAP embarked on a very ambitious – almost radical – trail-blazing path: Now only a single database for future ERP solutions including intensive use of open source products. SAP partner MSG Treorbis has taken up the challenge and developed the S/4 industry solution Discrete Manufacturing. E-3 Magazine's Peter Färbinger spoke with MSG Treorbis managing director Michael Neuhaus about opportunities, challenges and trends.

For established SAP customers, industry solutions represent important added value for their own ERP. This is true for all ERP versions, and SAP itself has long recognized this market need, having created more than 25 of its own industry solutions. However, not all needs can be perfectly met by generic industry solutions of a SAP. Enter a SAP partner whose ever more specialized know-how perfectly fills many niches and makes a very valuable contribution to the SAP Community. MSG Treorbis has concentrated on the thematic field of discrete manufacturing.

Digitalization and Industry 4.0 have intensified competition, also for discrete manufacturing industries. Where does Michael Neuhaus currently see the greatest challenges? "It is important to ensure the complete integration of all business processes as far as possible", is his initial response. "In discrete manufacturing there are still a lot of companies that have mapped their business processes across the individual areas, and even more often with the various business partners, whether customers, suppliers or internal divisions of the company, with numerous system and process breaks. Especially in manufacturing, companies have a wealth of information that is not used. The job is to recognize bottlenecks early on, avoid mistakes before they occur and anticipate market changes. The commercial indicators are often known, the trick is to use the host of information from production and purchasing in real time."

The MSG Treorbis offering is in place and Michael Neuhaus has raised the bar, which explains why he has, with his most recent offer, opted for the most innovative SAP technology: S/4, Hana and SolMan Version 7.2. This innovative impetus is necessary in any case because the challenges posed by Industry 4.0 are considerable. Bitkom, Germany's digital association's assessment: Industrie 4.0 has reached the business world yet companies are still cautious about investing in innovative digital technologies for networked production and products. As reality already shows today, the real revolution engendered by Industry 4.0 is not in production but rather in business models. Of particular significance here

are digital platforms. With their data-based value-added services, they create a buffer between manufacturer and customer, breaking up the established relationships between them and presenting a serious challenge to enterprises. Against this background, the Bitkom project group Business Models has thoroughly explored the impact of digitalization. The results are documented in their fact paper "Business models in Industry 4.0 – Shaping opportunities and exploiting potential".

Bitkom published the fact paper to tie in with the digital summit. To develop or adapt a business model or to leave it untouched is a decision each company has to make for itself. Bitkom sees its role as highlighting trends, and in this way facilitating decision-making. "The fact paper is a strategic paper whose aim is to challenge preconceived ideas", says Wolfgang Dorst, Area Manager Industrial Internet at Bitkom. "Technology as such is not the decisive factor for Industry 4.0, but rather digital business models".

Technically feasible – economically viable?

Consequently, as regards Hana, S/4 and Leonardo, SAP also talks in terms of a platform and not of individual solutions. Michael Neuhaus has adopted this aspect for discrete manufacturing at MSG Treorbis: Besides technical feasibility, for lot-size 1 the question of cost-effectiveness is also an issue. How can it be clarified in advance which configurations and implementations make sense? Michael Neuhaus: "Cost-effectiveness and of course practicability of the configuration are indeed crucial. Our solutions can help here through transparency in the calculation as well as in checking capacity and availability." What are the greatest challenges for discrete manufacturing? The wide differences up to lot-size 1, according to Neuhaus, and, he emphasizes: "The enormous diversity knows no bounds. Nevertheless, or even perhaps because of this fact, it is important to implement simple and fast solutions. Very often sales and production work on different systems and also with different master data. Moreover, mostly the theoretically possible variants are mapped in

with S/4, Hana and SolMan



Michael Neuhaus
is Managing Director at MSG Treorbis.

systems with an enormous amount of time and effort. Imagine you set up your system on the basis of needs and forecasts and not on the basis of theoretically possible product variants. We can help here with simple tools. Huge potential lies here. “

Success factor master data

Sound master data are the basis of every digitalization project. To what extent does MSG Treorbis support its customers in handling the master-data setup? “For many years, the focus was on master data management”, says Michael Neuhaus, speaking from his own professional experience. “Our view is that someone who is an expert for his own product does not need an expert for the master data in the software. Everyone should be able to transpose his specialist knowledge simply and quickly into the software. In addition, we have a decisive competitive edge, in that master data only need to be entered once. These are used in sales – whether Hybris, CRM or ERP – as well as in production and purchasing. Here we offer our solutions.” From order processing to delivery, the wide range of variants presents great challenges for established SAP customers. The process chain is based on a huge amount of data and information which have to be amalgamated at the right moment through a series of bifurcated and complex process steps. And Michael Neuhaus is fully aware of the challenges:

In the case of configurable products, information from the material master (e.g. weight) cannot be used, since these have to be derived from the particular types of products. Also, the availability check for all components of a product and product visualization are demanding functions which are only available to a limited extent in the SAP standard. Here, specific industry solutions for the SAP customer are absolutely essential. MSG Treorbis offers a SAP-certified tool in the form of Variant Process Optimization which optimizes the handling and the processes for configurable materials and may reduce complexity. The Variant Process Optimization module pro-

vides a number of functions that considerably simplify the handling of configurable materials, making the related processes easier to manage. All of the components of this module are of course fully integrated into the SAP standard. The Variant Process Optimization module essentially consists of two main areas, the first one from the area of Variant Configuration comprising the segments weight calculation, control of features for output into sales documents, availability check via the purchasing cockpit as well as package formation as an aid in production planning and control. The second area concerns communication with external systems, e.g. integration of programs for graphic order entry and for integration of webshop solutions via the SAP tools IPC, Hybris or Fiori.

What arguments do you employ to win over SAP customers, we asked Mr. Neuhaus. “The preconfigured solutions provide a solid foundation in the standard on the basis of best practice with a guaranteed introductory phase and a fixed price. In this way, we combine the greatest challenges of a SAP project.” Future security is of course also important, which is why MSG Treorbis with its Discrete Manufacturing opts for a S/4-based industry solution, Hana and Open Source also being part of the package. To what extent have Hana and S/4 penetrated the SAP Community, so that MSG Treorbis can already offer an industry solution on this basis – and what are your strategic thoughts on this? “The topic of S/4 has been embraced by the market”, says Neuhaus. “All our customers and prospective customers are following this topic with great interest.”

How stable is S/4?

There has been a lot of discussion in the past about the operative stability and comprehensiveness of S/4. Hana and S/4 are young SAP products - are they stable enough for an industry solution? Michael Neuhaus again: “The on-premise Release 1709 is a stable quality release. For this reason, it is logical to develop new industry solutions on this platform for supply to the market.” Industry solution Discrete Manufacturing thus requires also Hana and S/4 Hana Finance (formerly Simple Finance). What else? Which parts of the SAP Business Suite 7 and the NetWeaver are used? “Up to now we’ve focused on S/4 and ECC, supplemented at the base by SAP Analytics Solutions.” But import-

ant for the SAP Community: “All customers, regardless of whether they use ECC or S/4, can use our solutions”, says Michael Neuhaus.

The right migration path

Starting from S/7 (Business Suite 7) with AnyDB, a hotly debated topic in the SAP Community is whether the changeover to the S/4 should take place using the Greenfield or Brownfield approach or through Landscape Transformation. “Installed base customers need to carry out a cost-benefit comparison between the solutions” states Mr. Neuhaus. “Our MSG Fit method is of help here in making the right choice. There are increasing indications from the market that after a long lifetime of an installation a Greenfield approach where the process history is deactivated seems to be a highly promising choice.” The path is the goal: Linux, Hana and S/4 – what are the next technical steps in order to arrive at the industry solution Discrete Manufacturing? On this question MSG Treorbis shows openness and flexibility. “Every SAP migration path can be used whose goal is the S/4 platform”, is how Neuhaus explains his approach.

Cloud computing is presently one of the most discussed topics in the SAP Community. The MSG Treorbis industry solution is designed as an on-premise solution. Why? Could the solution also be operated in HEC or on AWS, Google Cloud Platform or Microsoft Azure? “At the moment we are offering the on-premise variant. HEC and AWS are definitely further possibilities for the future, also in view of a PMC-Per-Seat price model. Google and Azure are currently not planned”, is how Michael Neuhaus explains his perspective. He sees the SAP Cloud Platform as a great opportunity.

As with almost every SAP application, the user interface is naturally an important component. Here over the last years SAP invested a lot in the standard solution. How important is the user interface (UI) in an industry solution such as Discrete Manufacturing? And what solutions are there? From his conversations with customers Neuhaus is aware that “UI is immensely important for our customers”. “Every business partner, whether customer, dealer, order clerk, prospective customer or affiliate should be able to meet his needs and, depending on his know-how, be able to use an intuitive UI such as SAP Fiori and be guided through the system and obtain active support from it. And that on every device, regardless of whether an expert or an inexperienced user is using the solution”.

Besides the revised UI, SAP has begun to group new subjects into categories in the Leonardo framework. These include, for example, AI with Machine/Deep Learning and IoT. Is MSG Treorbis also planning to use parts of Leonardo? “At the moment, the answer is no”, says Neuhaus, “but this will be one focus of attention in 2018.” Because also in the areas of logistics, manufacturing and trade machine learning and IoT have great potential: “Nowadays, it is important that manufacturing defects are not spotted only at the quality control stage, but that potential discrepancies are noticed in advance during the manufacturing process and countermeasures can be taken before a fault occurs at all”, explains Michael Neuhaus in the E-3 interview. “This applies equally to tools and machines: to use the wealth of information during the manufacturing process in real time.”

While AI and IoT topics are innovative approaches, SolMan is an established product in the SAP Community. It thus seems to be a logical step that customizing the industry solution Discrete Manufacturing can also be carried out with the new SolMan 7.2. Neuhaus adds that the delivered solution is as a rule linked to the SolMan 7.2. “We offer this also ‘shared’ as part of a hosting service, in case the customer does not himself wish to run an additional SolMan especially for the solution. In this way, deployment and maintenance are ensured.” Also SolMan 7.2 is a relatively young SAP product: Are SAP customers sufficiently familiar with the functions and possibilities of the 7.2 version in MSG Treorbis’ view? “Certainly not the broad mass of customers”, admits Michael Neuhaus. “But it is a mature product which allows process definition and/or documentation in the Hana version without incurring additional licensing fees – a clear benefit for our customers.”

The success of the partners is always dependent on the SAP roadmap. On account of Hana and Hana 2, HEC, HCP and now SAP Cloud Platform and the annual S/4 releases, much learning effort and innovation are demanded of the SAP Community. MSG Treorbis has developed its own procedure model here. To conclude the E-3 interview, Michael Neuhaus once again: “We are strongly oriented to SAP and are continuously honing the SAP solutions based on our own experience gained from numerous customer projects. I would like to see the user becoming ever more the focal point. Not only technically savvy SAP experts, but indeed every user should in future be able to use an intuitive UI adaptable to his requirements”. (pmf)