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Proactive maintenance via IT-Informatik’s IoT-portal

Since June of this year, IT-Informatik is the majoritarian shareholder of the expert for warehouse logistics, foreign trade and EDI in SAP-setting in Berlin – an ideal addition complement our portfolio. Read more about Mercoline, our new second “Prussian” pillar with Ethalon in Hamburg, in this edition of the item.

With OPRA, we meanwhile placed ourselves at the technological top in the field of SAP-based maintenance, which naturally results in an increase in sales and employees, as well as in the expansion of the customer base via acquisition. Numerous new projects at home and abroad have been realised in the recent past. Large and international customers have firm expectations towards their IT-partner’s company size, service capability and the extensive technological portfolio. We meet these expectations with growth, more partnerships/acquisitions and now, after Hamburg and Barcelona, the development of the location in Berlin. Nonetheless, during the internationalisation, we do not neglect our Homebase. The regional proximity and closeness with the clients on site is the foundation which enables a successful expansion in the first place.

In times of digital, networked factories, automated maintenance becomes more and more important. With OPRA, we offer the perfect solution, as it allows companies to further well-directed the digitalisation process in the field of production – and all this continuously, from the machine sensor technology on site to data analysis in a cloud based platform and finally the activation of corresponding maintenance measures in SAP. Here, the future will be full of interesting innovations. One thinks of drones, for instance, that circle above big industry ducts or chimneys and that pass their inventory on to a central Backend-(SAP)-system. IT-Informatik will be present, when the future of maintenance will be written.

With this in mind, I wish you be inspired by this edition of the item and that you have beautiful and restful holidays.
Barcelona is the smart city of Spain, nowhere else are as many projects, software providers and research institutes, all concerning digitalisation and Industry 4.0 represented in one place as in the Catalan metropolis. This is why IT-Informatik has already started years ago to develop a new site in Barcelona, which has been thriving ever since. Meanwhile, the team consists of one manager for development and innovation, three software developers, one consulting manager as well as a number of international interns, which are amongst others from the USA, and which already contribute actively to the project business.

Their coordination lies in the hands of Richard J. R. McCullough, in charge of the international management of sales, processes and projects at IT-Informatik. The 29-year old, who was born on Tenerife, has been working at IT-Informatik’s site in Ulm for 2, 5 years - with regular trips to Barcelona - and he is substantially responsible for the advance in international expansion of IT-Informatik.

The Barcelona team maintains close relations with the Universitat Politècnica de Catalunya (UPC) and the Eurecat Technology Centre, which are both situated locally. Together, a SAPUI5 App for an innovative Management Hub was developed. In this app, all involved partners can collect and discuss ideas for new technologies and business models in the Hub. After an evaluation process, a selection of those are supposed to be developed or implemented practically. This Hub idea was already presented to companies like Siemens Mobility and Continental, which are expected to be gained as new partners. The software originates from IT-Informatik, UPC and Eurecat contribute required hardware components as well as an exposure towards new talents.

With initiatives like this, Barcelona is supposed to become a new location for IT-Informatik, at which new, high-tech Industry 4.0 solutions, are conceived, tested and made ready for series production to be then brought on the market via consulting and implementation projects. As a partner in the Railgrup cluster, an international platform of logistics operators and experts, IT-Informatik, among Siemens Mobility, TMB, AV Engineers, World Sensing and others, currently participates in the measurement of tremors in the subways of Barcelona. In perspective, this is about the prospective possibility to use Opra for condition-based maintenance as assigned by the city government.

“Not only on site, but also throughout Europe, in Singapore, Malaysia, China, Iran and the USA, we talk with government representatives and companies about potential digitalisation projects”, tells Richard J. R. McCullough. In this way, Barcelona literally becomes the gateway to the world and functions as Hub in order to propagate company-related topics and technologies internationally. For this, the technical possibilities and framework could not be better than they are in the smart city of Spain.

“Gateway to the World”

IT-Informatik continues to strengthen its staff at the location in Barcelona and from Catalonia, it pushes forward its internationalisation.
Preparatory project at Kässbohrer: IT-Informatik makes the SAP Readiness Check suitable for the mid-sized sector.

If you want to prepare a five course menu, you have to think ahead: what has to be bought, which ingredients are at home, how much cooking time does every dish need, how can everything be coordinated chronologically? With regard to the future of their SAP landscape, the Kässbohrer Geländefahrzeug AG from Laupheim has, in this sense, all ingredients at home and is well prepared for the later upgrade to the new product generation S/4HANA. During this, they were supported by IT-Informatik. In Spring/Summer 2018, IT-Informatik performed a two-stage SAP Readiness check for the Kässbohrer AG, producer of innovative vehicle transporters and refrigerated box trucks.

To make sure the later migration project does not stagnate unexpectedly

"The first step in the Readiness Check is in the first instance the database technology", explains Christian Schroll, SAP logistics consultant in the business unit industry at IT-Informatik. "What has to be done to switch from a random previous database in the IT-language "anyDB" to the new HANA-architecture?" This is what the SAP-team of IT-Informatik assessed at Kässbohrer. At the same time, it was examined what has to be done in order to not only migrate the database, but also the current ERP-system smoothly into S/4HANA.

What has to be done with the master data?

Have the debtors/creditors already become business partners, can the material numbers maybe already now be expanded from 18 to 40 digits? Even though Kässbohrer plans the S/4-Upgrade only for 2022, they want to prepare, so that the later expense stays manageable and the later migration project does not stagnate unexpectedly.

SAP offers the Readiness Check for all customers in the support portal for free. It can be seen as a comprehensive system analysis before the switch from SAP ECC to the new S/4HANA. SAP clients can thus figure out if their previous system is convertible at all or what has to be adapted for the migration to work.

Dig deep into the SAP foundations

This check is thus not an easily applied tool, but an individual package of measures and tests. Therefore, you have to dig really deep into the SAP foundations. Individual custom codes (additional to the standard developed individual functions) have to be examined, a so-called simplification list is to be set up in which will be documented which of the previous functions will be omitted in the future and how they can be compensated. The system analysis via the SAP Readiness Check concerning the database part was done after two weeks in June 2018 and resulted in a concrete recommendation for action: the vehicle manufacturer received a "cut over plan" with an individual roadmap: what steps are mandatory to be changed at the database ("must"), which ones are recommended ("should") and which ones are optional ("can")? In which order and when should the steps be taken to precisely attain the S/4-switch? After the database check followed in a second step the software check of the SAP ECC system. No cook could ever be better prepared for his evening menu than Kässbohrer.
With Mercoline GmbH, IT-Informatik experiences after ETHALON another strategic increase. It is becoming more and more diverse under the umbrella of IT-Informatik. Since June 2018, the Mercoline GmbH in Berlin belongs to the company. The expert for transport logistics, foreign trade and EDI in the SAP-setting makes an ideal addition to the already existing product and solutions portfolio. With the origin of decade-long experience in the consumer goods industry, the certified SAP partner Mercoline since 2002 has developed into a successful IT-service provider for oneway, trade and logistics.

Mercolines service offer comprises solutions, process consulting, IT realisation and operation for SAP and EDI. The own software suite M. Line consists of combinable add-ons for SAP ERP and S/4HANA, which support design of the Supply Chain. It is in use in companies of all sizes within various branches and across different countries. In addition, apart from the communication services CS Line, Mercoline offers further EDI- and other services, such as digital signatures for a better connection of clients, suppliers, banks, and customs or logistics service providers to own processes. A clear-cut acquisition which provides starting points mutually. Therefore, IT-Informatik gains a new interesting customer field within the area of transport logistics and foreign trade which offer great potential for own solutions in the area of SAP integrated maintenance. In the near term, Mercoline will establish know-how and staff according to oPRA at their own site. Expertise for Supply Chain Solutions and EDI

In return, Mercoline will introduce their Supply Chain Solutions and EDI to the customer base of IT-Informatik. Mercoline’s CEO Stephan Schultze: “In doing so, we replenish solutions in the oPRA area with further SAP integrated offers for outbound processes, like the integration of transport service providers, ATLAS-customs clearance, export control or preference management. This way, IT-Informatik will be able to display all upstream and downstream business processes from a single source. Synergies do also happen in SAP consulting. In joint teams, we are able to combine our own separate skills which makes us even more effective.” This power on a national level can also be found at the location in Hamburg, where for quite same time the oPRA team is being expanded in order to approach new clients in the Northern part of Germany even more intensely. Furthermore, with ETHALON GmbH in Hamburg being part of IT-Informatik since 2014, there are various promising starting points/ideas for a cooperation in the area of SAP integrated maintenance.

Thanks to ETHALON, IT-Informatik extended its presence in the retail area. Before that, ETHALON as an expert in retail was part of Görtz Retail GmbH, and for more than 10 years and still, it belongs to the market leaders in software and services in the retail area in the German retail landscape. That way, the business unit retail of IT-Informatik develops further even in Hamburg. It was only last summer that a relocation to new business premises in the Harbour City was needed/ necessary, as the old site in the heart of Hamburg – the Spitalerstraße – had become too small for the growing team.
While the entire SAP community is pondering about the perfect moment to switch to the new product generation S/4HANA, some companies proceed step by step. Just like the REFlEXA-WERKE Albrecht GmbH from Rettenbach, significant producer of sun shading technology. There, IT-Informatik recently migrated an existing SAP-Ecc-6.0-system to the newest Enhancement Pack 8 and, at the same time, replaced the previous database with SAP HANA. Equipped with this infrastructure, Reflexa is prepared strategically to a later S/4HANA-shift – and already, they profit from a better performing overall system.

“Particularly when we considered all possible risks, we were deterred to already switch to S/4HANA”, describes Johanna Pfäffle, cIo/IT division manager, Reflexa’s IT-strategy. “We have established a very complex business logic and work intensively with the SAP variant configuration with which we create products individually for the client. For this scenario, we considered the present developments in S/4 as not ready enough.” Hence the thought of at first establishing an up-to-date infrastructure via migration to the newest ECC version and HANA-architecture. This infrastructure now represents the base for a later and thus easier performed S/4-switch.

Detect risks early via sandbox-mode
IT-Informatik has been serving the expert in sun shading technology in SAP-Support for several years. “At first, in July 2017, we installed a sandbox as a copy of productive system,” explains Michael Wolf from the business unit Management consulting at IT-Informatik. Without disrupting the productive system, the project team was able to adapt the previous client-specific programming (custom code) in this encapsulated environment to the new system as well as to test and adapt interfaces to different peripheral systems. “This way, you already know in advance what expenditure for the actual switch-over of the productive system will arise and thus detect risks early”, according to Michael Wolf.

After successfully completing the migration of the sandbox, autumn was about the switch-over of the actual system line (development, test and productive system). Each system switch succeeded a testing phase during which Reflexa could check all processes. This usually long feedback phase turned out to be fast and low-risk thanks to the groundwork in the sandbox. This way, the switch to the new SAP with HANA data base could be turned in the background as planned in the beginning of January 2018. At Reflexa, about 170 Users altogether work daily with the ERP-system, in action are all core modules except for the personnel management. The feedback about working within the new environment is clear: “Particularly the gain in performance is standing out”, according to Johanna Pfäffle. “Now our complex business processes react significantly faster.” Even though not all customized developments for HANA have been optimised, which is planned to be done in a later step of the project. Even more surprising are thus the already achieved performance gains. Meanwhile, Johanna Pfäffle stays relaxed in sight of the coming S/4-switch thanks to this efficient infrastructure in the background.

The REFlEXA-WERKE Albrecht GmbH looks back on 56 years of company history with their brand Reflexa. As one of the most important full-range providers for customised shading solutions in Germany, the family-owned company with its headquarters in Rettenbach and second site in Oderin (Saxony) employs more than 350 members of staff. Apart from sun shading and insect screens, Reflexa has been an expert for oblique shading constructions in asymmetric windows for more than 40 years.

www.reflexa.de/en/das-unternehmen/ueber-uns
During the third Communication Day of IT-Informatik, over 100 interested people exchanged ideas about the Internet of Things as driving force of digital transformation.

What do cryptocurrencies and blockchain, the strategy of digitalisation in the state of Baden-Württemberg and an app for cleaning machines have in common? They all were subjects of discussion during the third Communication Day of IT-Informatik in Ulm late in March. The over 100 participants were offered a lot of interesting talks, vivid discussions concerning present technical developments and practical insights into web-based application solutions, for instance about digitised purchase.

From the number one of inventors to the economic leading region in Europe – everybody is talking about bitcoins. But what are the opportunities and risks of the cryptocurrency, and what is the story behind blockchain? The issue about Facebook and Cambridge Analytica made this topic explosive on a daily basis. In consideration of these events as well, Prof. Dr. Dominique Schröder of the Friedrich-Alexander University Erlangen-Nürnberg clarifies: the traditional infrastructure of the internet cannot guarantee enough security anymore. Blockchain technologies offer inasmuch an opportunity, as data structures are organised decentralised. This way, a democratic system evolves which can offer transparency and trust.

Stefan Krebs, commissioner for information technology of the state government of Baden-Württemberg, points out to all those present that not only the federal government employs a digitisation commissioner, but that also the “Ländle”, i.e. Baden-Württemberg, has dedicated itself to the future. Long ago, the state has recognized the relevance of digitalisation and treats it thus not as a technical, but as a social topic, according to Krebs. Because Baden-Württemberg still wants to remain the number one inventor – as economic leading region in Europe. As focus areas, Krebs named, inter alia, the digitalisation of municipalities and administration, intelligent mobility concepts and the promotion of start-ups particularly within the software sector. Currently, the biggest challenge here is to meet the need of software developers.

Smart applications for all areas of life

In practice, with a service app for Columbus developed by IT-Informatik, the guests could then witness at first hand that even cleaning machines do not shrink from digital transformation. The supplier portal for the digital exchange of orders and other purchase documents on the basis of factor:plus at the Erwin Hymer Group was of great interest as well. Finally, smart applications like this one were examined under different angles during a panel discussion. General tenor of the event: The Internet of Things is still advancing and the idea of an automation of objects through their intelligent networking has long reached all areas of life.

During this, it applies for companies to put the needs of their customers first and to not dismiss technical advancements as temporary trends. The middle class of Ulm is ready to face this development. This was well proved by all companies present during this year’s Communication Day of IT-Informatik.
Where foundries are today more and more networked, the image of maintenance changes as well. OPRA is the answer of IT-Informatik to the digitalisation of the industry sector. The SAP-based application for the maintenance of mobile and stationary systems and devices offers the user intuitive and process-oriented user interfaces as well as full and contextual information “at the push of a button”.

With more and more companies active in production dealing with Industry 4.0 scenarios, IT-Informatik as well notices considerably growing demand for OPRA. Apart from the BSH Hausgeräte GmbH, also Bosch Power Tools, Miele & cie. KG, MAhLE GmbH, AG der Dillinger Hüttenwerke, SchOTT AG, Kiekert AG, BHARAT FORGE CDP GmbH, Bernard Krone Holding SE & Co. KG, TOX PRESSOTECH-NIK GmbH & Co. KG or the SWK STADTWERKE KREFELD AG have chosen OPRA and thus improved their data quality and transparency in maintenance.

Maintenance of production lines and supply systems
The BSH Hausgeräte GmbH is a worldwide operating company with production sites in Europe, America and China. BSH does not only have to maintain all its production lines, tools and buildings, but also its supply systems and building services. For this, as a long-standing SAP user the manufacturer in Europe has been using SAP EAM (Enterprise Asset Management – former Plant Maintenance) for more than 30 years, in the USA since 1995 and in China for 3 years.

Due to the size of the company, the SAP-ERP-system is divided up in several ways. There are two development systems for customising and program development, one for Europe and one for America/China, which are then in the regions each integrated into an own factory production system. In addition, there are several different parallel production systems, like FI/CO, CMO, SRCM, Service …, which of course communicate with each other actively.

Simplify the SAP landscape
For several years already BSH is working on simplifying this SAP landscape and on standardising these processes on a global scale. While in the past each factory had its own SAP system, in Europe, these were combined in one unified SAP “net-F”-system.
between 2003 and today. The sites in the USA are working together on the new factory system in an own productive landscape. At the same time as the 100%-takeover of the provider of home appliances by the Robert Bosch GmbH in January 2015, the topic of Industry 4.0 became more and more the center of attention. Parts of the production are moved to manufacturing-execution-systems (= MES, the process-oriented operating level of a multiple layered manufacturing management system), “or also the manufacturing control area, like one said earlier”, explains Peter Ziwschler, SAP/PM IT product manager at BSH. “other parts go into the ERP-system. MES are becoming more and more the control area and the link between ERP and machine control.”

In this context, BSH wants to modernise and speed up their maintenance. During the search for a suitable system within the own group and on the free market, soon oPRA came up. “Its functionality fits exactly into the SAP and manufacturing landscape like we imagine. The cost-benefit ratio of IT-Informatik is one step ahead of other products as well.” oPRA is fully integrated in SAP, mobile applicable and complements SAP EAM with usability, process orientation and the smooth integration of third-party systems. This way, it enables a technical, functional and visual integration of plants, persons, processes, data and systems in SAP. Work directly on the assembly line in SAP Peter Zischler: “We require online access to the master data, the orders and the material in storage. This is what oPRA offers.” The ones in charge of maintenance have mobile clients of the solution on their smartphones and tablets. With these, they are right at the assembly line next to the plant and in case of a malfunction, they can check still on-site in SAP if there is a spare part. They can reserve or book it, directly take it out of storage and integrate it into the maintenance order. The maintenance person thus does not have to go to a terminal anymore and saves a lot of transit time in the long production lines. If else a plant fails, he walks several times back and forth between plant and SAP terminal in order to inspect the damage here, create an order there, to check if the used spare part is in stock according to the parts list, etc.

“Nearly like a kind of pre-project to S/4HANA” The IT department sees further advantages in the solution: now, with the new technology and its Fiori surfaces, BSH Hausgeräte GmbH is well equipped for the new SAP product generation. Peter Zischler considers oPRA to almost be a kind of pre-project to S/4HANA, “in order to get a feeling for how the future work with the SAP Fiori surface will look like.” Since March 2018, oPRA has been used productively in pilot sectors at even four sites: Dillingen (dishwashers), Giengen a. d. Brenz (refrigeration devices), Montanana in Saragossa/Spain (stoves) and Nazarje/ Slovenia (consumer products). Since June, BSH has been moving further afield with this system. In the beginning phase, about 280 responsible people for maintenance worked with oPRA, in the final expansion phase they are ought to be 500. Peter Zischler: “The project is going really good. We are extremely pleased with IT-Informatik that carried out numerous BSH-specific adaptions in oPRA for us, as we are working with a lot of SAP settings, which are not available in the oPRA standard.” Networked production plants and a SAP integrated value chain – thanks to this duo, BSH resolutely advances digitalisation in house.
Since 2013, the BWK GmbH investment/ associated company, one of the most important capital investment companies with its head office in Stuttgart, holds a majority stake at IT-Informatik. As an investor that thinks ahead and that is focused on the mid-sized sector, it is an energetic companion of the continuous expansion strategy of IT-Informatik – and at the same time, it uses their consulting expertise. Thus, the business unit Management Consulting recently performed a first IT-Due-Diligence-Project for the company.

Founded in 1990, BWK disposes of about 300 million euros of investment resources and is at the time engaged/involved in 19 companies with about 150 million euros. The latest acquisition was HORA-Werk GmbH in spring 2018, which previously belonged to the Leipold-group. The company (founded in 1919) is one of the leading developers and producers of precision-turned parts and electrical components with around 70 employees in the head office in Bünde (East Westphalia).

IT location determination
In the run-up to the acquisition, a Due Diligence took place. For this, Siegfried Meier, Head of Management Consulting at IT-Informatik received the order to analyse the present situation of IT at Leipold and HORA and to therewith derive the transition- (transfer-) scenario, the ERP strategy and the cost involved as well as the investment required. “During the process of the IT location determination we first pointed out the situation at the beginning, the fields of action and the modernisation requirement”, he explains. “What does the IT application environment and infrastructure look like, what core processes and business relations are there? What IT contracts and license terms do exist? Are there any ongoing IT projects or what projects are planned?”

Then the transition scenario was run through and an early separation of the IT landscape from the former parent company was
compared to the late variant. In this concrete case, it was decided to go with the later separation, which means that the existing IT landscape will be used for at least one more year. During this time, the IT landscape will be completely divided off step by step. Further elements of the consulting were added: an ERP strategy, an IT sourcing concept, the determination of the investment required, the calculation of necessary non-recurring costs and running costs as well as a detailed schedule for the implementation.

**ERP selection and process analysis**

The FLEXA GmbH & Co production and sales KG in Hanau as well commissioned the Management Consulting of IT-Informatik to select a new ERP system and to already do a preparatory process analysis. FLEXA, one of the most important producers of high-quality protective tubing and guide chain systems, is globally active and involved in an expanding market. In detail, the consulting quota comprised the ERP selection during the planned replacement of the previous Infor-Ba-an system. Requirements and evaluation criteria were defined, a call for bids was started. The aim was to compile a shortlist of providers and eventually select the most suitable candidate. For this, a number of workshops took place to include the requirements of the management and the departments. Together with the departments and with a focus on the field of production planning and control, the processes were incorporated and fields of action identified. In smaller workshops even before the introduction of the new ERP system, possible solutions for specific requirements were developed, like an extended workbench, multi-machine operation, setup groups and optimisation, product classification and allocated planning and disposition rules.

**IT service processes redesigned**

At the Airbus-Defence-and-Space-Spin-off HENSOLDT Sensors IT-Informatik eventually redesigned all IT service processes (ITIL) for Hensoldt IT during the carve-out process. "For this, we remodelled the main service operation processes like change, incident and problem management, but also governance processes like asset, contract and security management in the Hensoldt BPM tool in autumn 2017", as Michael Wolf, management consultant, explains. The processes were coordinated with the stakeholders and released in a defined release process. The MC team particularised them with the different process roles (for instance service manager, change manager), as well as panels (change advisory board), they described their major activities and responsibilities and one step further, they rolled out the processes of the new IT organisation.
Ehrmann AG is one of the largest milk processing companies in Germany. Ehrmann looks back on a long business tradition. In 1920, dairy master Alois Ehrmann (Sr.) started his first dairy as a one-man operation. Five years later, he took on a lease for a second, dairy, laying the foundation for expansion that continues to this day. Today, Ehrmann has seven sites and is internationally diversified. In addition to the sites in Germany, our company has production facilities in Russia and in the USA, as well as sales offices in Italy, Spain, the Czech Republic, Poland, Finland and China. The Ehrmann AG Group also includes the companies J.M. Gabler Saliter and the Fleischwerke Zimmermann meat processing plant. Ehrmann brand products are sold in over 50 countries around the world. Ehrmann AG and its more than 1,960 employees generated a turnover of 800 million euro in 2017. www.ehrmann.com

Ehrmann advances the digitalisation in materials management. Maintenance persons and employees in the warehouse only recently use a SAP Fiori app of IT-Informatik. It is installed on hand scanners and this way, it allows the colleagues to take maintenance material in or out of the warehouse quickly.

We wanted to mobilise these processes, as traditionally, they are very time consuming”, explains Volker Scholz, head of strategic development at Ehrmann.

IT-Informatik, as strategic development partner for mobilisation and digitalisation, received the order to create a mobile scan partner for mobilisation and digitalisation, IT-Informatik, as strategic development explains Volker Scholz, head of strategic tradition, they are very time consuming”,

The Fiori App offers from no on different functions in the well-known tile view. There is the goods receipt for orders and the goods issue on cost centre or maintenance order. A scrapping function is integrated as well: if a part is to be removed permanently from the warehouse, a multi-levelled release workflow takes effect to permit the scrapping in SAP. The stocktake tile on the contrary to all other tiles is already used strategically. It offers the team a stocktake that runs smoothly. Firmly, single storage areas (shelf 5-10) can be stocked. The colleague scans the material, it is counted and the present supply is reported back to SAP.

Soft- and hardware are conceived in a way that the logistics specialist can also easily record and scan parts that are stored one behind the other. Standing on the stairs, just right beneath the warehouse ceiling, one sound is enough and SAP is back on current state. “This accelerates the counting immensely and our materials management is thus better maintained and up-to-date”, says Susanna Schenkel, overall project leader at Ehrmann.

The project started in June 2017. “Various workshops and inspections of the factory followed, during which the IT-Informatik team familiarised itself with the processes at Ehrmann”, says Matthias Menzel, Management Consulting at IT-Informatik. A series of questions were to be answered:

What functions does the app have to comprise?
Who exactly shall be allowed to use it? Do all technical requirements exist? What is the authorisation concept supposed to look like and how is the best possible usability of the app attained?

Volker Scholz: “IT-Informatik took on and realised our wishes and demands very well, thanks to their knowledge about SAPUI5. With the new app, we took a big step forward in the matter of mobility.” The inspection of the movement of goods via app is only the first step towards mobility. New mobility projects such as digitising the quality assurance, are already ready and waiting.
Leisure vehicle manufacturer Erwin Hymer Group connects its partners with factor:plus.

Just-in-time production is the standard in the automobile production. This applies for cars, but also for caravans and motorhomes. Just like at the Erwin Hymer Group with their head office in Bad Waldsee, under whose roof multiple manufacturers of this field are united. Numerous providers supply vehicle components directly to the conveyor belt of several production sites of the Erwin Hymer Group.

The manufacturer preferably connects providers with a high number of order and supply positions fully automatically to its ERP backend. However, for many providers such an integration via Electronic Data Interchange (EDI) does not make sense because of a lower order volume or insufficient IT resources. To communicate with partners like these, the Upper Swabians were looking for a simple, intuitively usable portal solution. And they found it in the digitisation platform factor:plus of IT-Informatik.

Full speed ahead
For factor:plus

The core brand Hymer with its head office in Bad Waldsee, a subsidiary of the Erwin Hymer Group, has, as pilot for the group, put the portal factor:plus into operation with the first few partners after a project duration of six months in May 2017. It complements the already existing B2B solution and allows further providers to electronically exchange orders, changes of orders and supply notifications with the automobile manufacturer.

More detailed production planning thanks to automated communication

The partners get informed via e-mail about new forecasts, orders or changes of orders in the factor:plus supplier portal. With the push of a button, they then create a shipping notification on the basis of the most important order data, which the portal automatically imports into the ERP of Hymer. With this new kind of supplier communication, Hymer provides for a continuously updated production planning. On top of that, the shipping notice facilitates the income of goods significantly. Manufacturers, during extensive deliveries, only have to book any supply discrepancies manually. Everything else works automatically via barcode scan with the MDR (Mobile Data Recording) device.

The portal is operated in the highly available computer centre of IT-Informatik. The summary after one year: automated communication contributes clearly to a more detailed planning of the production.

Sascha Ebenhoch, team leader of disposition of purchased parts in Hymer’s order centre, explains it like this: “IT-Informatik’s solutions make paperless communication possible. We can provide suppliers with forecasts, and receive electronic shipping notifications. Thanks to the homogenous product labelling including barcode, our process security in logistics and goods receipt has increased clearly.” With the adjusted notification systems, disposition is able to negotiate or demand individual rules and to examine the change history transparently.

“And because just-in-time or just-in-sequence processing was previously only possible via the B2B platform, the new portal even offers the opportunity to build up or expand further business relations”, Sascha Ebenhoch, gladly.

The portal is since its introduction gradually being expanded by more suppliers, sites and kinds of purchase documents.
Sanctions are absolutely supposed to be frightening: henceforth, fines up to 20 million euros or 4% of the global annual turnover of a company threaten those that violate the new EU-wide regulations of the General Data Protection Regulation (GDPR). Although, experts appease and not everyone will instantly receive a claim of an eager lawyer. However, it is urgent for companies to make sure to cover all demands resulting from the GDPR. Those who were not ready until the 25th of May 2018 are not alone: the majority of all German companies, particularly small and mid-sized companies, was according to a survey not prepared sufficiently until the day of the deadline.

Here, IT-Informatik wants to help and offers their clients a multi-staged GDPR package made especially for the mid-sized sector. Consisting of individualised workshops and the new GDPR portal, it leads companies stringently to a legally safe solution, with which all regulations concerning data protection can be met.

The protection of individual personal data is a process issue.

The GDPR aims to determine unified, EU-wide valid rules to protect the basic rights and basic freedoms of individuals with a focus on the “protection of individual personal data.” They affect the periods concerning the minimum storage and deletion of data as well as the protection of unauthorised access to the data. Those rules apply to every processing site worldwide that collects or processes any individual personal data of EU-citizens with regard to offers of goods or services in the European Union (law of the place of performance) – this applies as a matter of fact already since 2016, the 25th of May 2018 was only the deadline of realisation after two years of a transition phase.

To guarantee data protection is not primarily a technical topic, but companies rather have to address it on the level of processing – differentiations that many are not aware of. Thus, an up-to-date overview has to be created of all systems that collect or comprise individual personal data. Consents of data collection and usage have to be obtained and documented accordingly.

Quick check about GDPR Readiness

The workshops that IT-Informatik has developed together with Dr. Joachim Schmid, lawyer specialised in IT law, help to detect questions and to answer them. They take place on-site at the client’s and are individualised to...
the company - too distinct are the demands and the measures that are necessary in the single case. Because what has to be done depends decisively on the degree of GDPR conformity that has already been attained.

Anyone can find that out quickly for themselves. Are the data of all responsible persons in the company known, and do these know, where they have to be saved and where they can be found? Are the IT systems able to meet the requirements concerning infrastructure and technology according to the GDPR? Did the employees get informed about the new regulations and do they know about the future treatment of all individual personal data? Is there already a processing register of all operations, is the procedure concerning reporting obligations defined and determined? Was a data protection representative already assigned? Every organisation, at which ten or more employees mostly regularly work with personal individual data, needs such a representative. Probably no company starts at the same level concerning data protection, which is why individual consultation is needed.

Multi-client capable cloud solution on the subject
Apart from workshops, IT-Informatik developed a solution concerning the handling of the GDPR. During the first step, this being a multi-client capable cloud solution offers access to a number of exemplary processing registers as well as to technical and organisational measures (ToMs). It contains information about training measures, risk assessments and also about how to deal with contract data processors (cDP). In addition, the portal provides emergency plans and legally verified templates for non-existing documents. The registration, as well as the data transfer and storage take place encrypted.

During the further process, the portal is to be expanded continuously. Hence, a document generator is planned for the third quarter with which different documents (e.g. ToMs as description of technical requirements) can be created with a wizard compliant to the law. It is possible to download legally verified text modules; in addition, there is a change management in case of legal changes (notification of the ones responsible). With that, there will be automatic notifications if individual personal data have changed. The one in charge (for example the external lawyer) can then update the according text modules und upload them via the update-generator, so that they will be taken over to the target document. In further steps, the GDPR portal is supposed to become a real-time data provider for users. Backend-systems are connected to the portal via EDI. With a search mask, the user can search the systems for data about a person and have them compiled.

On the 8th of November 2018, IT-Informatik will be guest at the IT-Congress at the university Neu-Ulm. There, Roman Hoffmann, GDPR-project leader at IT-Informatik, and IT-lawyer Joachim Schmid will inform about the current state in terms of GDPR. Thus, in the matter of EU data law, IT-Informatik does not leave its clients out in the cold. If you have any questions or want to establish contact, please address to dsgvo@it-informatik.de.
Within the optimisation of traditional purchase processes, particularly within c-articles, lies considerable potential of rationalisation. The central procurement platform factor:plus e-procurement standardises order channels, supports in concentrating on one core product range and opens up the possibility to handle all procurement processes in one single system. It helps to reduce order processing time and relieves the central purchasing. The airport Stuttgart and the Stadtwerke Ulm/Neu-Ulm are two companies that have been applying the solutions of IT-Informatik since several years.

The product is continuously being developed and these users as well have been using advancements like the document management or the new dashboard as a complement to the previous reporting for quite a time. Concerning data display and analysis, the dashboard sets new standards for the user. The e-procurement calculates client individual key performance indicators (KPIs) on the fly and displays them in a nutshell in the dashboard for authorised users, without the user having to ardously analyse reports manually. It automatically generates the KPIs and visualises information accordingly. For instance the processing time from an order to the approval or to the income of goods in days, the top 10 of all ordered articles during the last six months or – very popular – the adherence to delivery dates of the present year. It serves as a valuable base for discussions with the supplier.

Quickly create new users
The Stadtwerke Ulm/Neu-Ulm uses apart from the dashboard the new document management in factor:plus e-procurement. It enables access for the usual user to those documents that are released by the administrator (e.g. for tutorials, FAQ, etc.). The process of integrating new users into the platform is thus being facilitated. The administrator can automatically trigger an e-mail to newly created users, which can then assign their access data themselves. During this, special marked documents from the document management can automatically be attached to the e-mail, like for instance an implementation guide.
The airport Stuttgart benefits additionally to the dashboard from the automated variant detection. Background: the company maintains its stock material in SAP. This, including inventory data, is transferred automatically from SAP every day. However, among these, there are several similar single articles that only differ in one or few features (e.g. work clothes in different sizes, ground gas caps in different sizes, etc.).

**Algorithms detect variants**

Factor:plus e-procurement now detects automatically corresponding material that are only variants of each other, for example because of the similarity of the material name or material number, during the data import thanks to the newly added algorithms. It displays them in groups and thus significantly clearer. This works with all catalogues that are imported into the e-procurement by supplier or client. And these can also be used for suppliers that provide already themselves variant relations in the catalogues.

With the expanded e-procurement, the airport Stuttgart has furthermore improved its authorisation processes and a new, always displayed search bar offers search terms already upon the entry of the first letter. Despite a stable business development and an above average growth of the number of passengers being transported, at the time, the airport management decided to introduce an e-procurement solution because of the growing cost pressure. The shift from traditional to electronic processes influenced the value chain of the business effectively in a positive way in the field of procurement, materials management and logistics.

With innovations like the dashboard, the document management and further process optimisation in factor:plus, IT-Informatik works for its clients like the airport Stuttgart or the Stadtwerke Ulm/Neu-Ulm to enable them to continuously improve their business relations with providers.
This is how continuous digitalisation works in the production: i-it-informatik makes production plants with sensors capable for Industry 4.0, collects and analyses their data in the new IoT portal and triggers subsequent processes in SAP.

The machines are far away. The maintenance person or the production controller, however, sees the way the machines work on the computer or portable tablet in the “IoT portal”: For each plant, they can observe any sensor data throughout the day and check, how speed, oscillation, temperature, etc. impact single/separate steps of production. They can change parameters and, if needed, initiate measures accordingly. The browser-based portal, that offers these features, is the latest development in the field of Smart Factory within the business unit Digital Transformation at IT-Informatik.

Division manager Armin Schmid: “Internet of Things means networking. This is exactly what we make possible with the IoT portal. Via the cloud-based controlling centre as hub, digital automated data streams are created, from the production to the triggering of corresponding maintenance measures in SAP.”

The sensors comply with common industry standards, are resistant against high temperatures and all other usual/known adverse circumstances in production. They pick up all sorts of production data – temperature, vibrations, speed, and so on – and upload the data variably (either permanent or only in case of defined interfaces being crossed) into the cloud-based IoT portal, in which the person responsible can check and analyse them. The advantage of the cloud solution: the client does not have to run its own server in order to analyse machine data.

Analysis software evaluates data
In the portal runs an analysis software of IT-Informatik. It evaluates the data with pre-defined threshold values. If the sensor thus measures a critical value at one point, a maintenance notification is generated in SAP via the software, for instance, or a production feedback is triggered, if necessary with a subsequent order of spare parts. Within the settings of the portal, the user can adapt limiting values, configure devices, trigger notifications manually or create excel exports of the data that were picked up.

“You can already read a lot off the simplest power consumption data”, explains Armin Schmid. “If the consumption is maybe too high, it can mean that a tool is dull.” Consequence: The production quality gets reduced. Without permanent surveillance of such data and the automated maintenance measures that were derived from the surveillance process, these conditions were made aware of far later. In the food industry, for example, the cool chain must not be interrupted. By continuously measuring and documenting temperature data, a company can prove that the necessary temperature for a good was met at any time. In the analysis software, sensor data can be connected: if temperature, speed and power consumption perform in a certain combination with each other within a certain time frame, an action is triggered automatically.

“What is possible without IoT portal in particular”, according to Armin Schmid, “is a proactive maintenance. If it becomes clear, that a machine is soon going to decrease in performance, maintenance can be planned in time, namely exactly during less peak-productive periods. Thus, no firemen operations, but acting instead of reacting. By that alone, production losses and hence costs can be reduced significantly.”
ARE YOU READY?

Ready for SAP HANA or S/4HANA?
Time for the Readiness Check of IT-Informatik!

Our SAP HANA Readiness Check provides sound answers to all questions about a possible approach. We analyse your existing infrastructure and check the compatibility of your SAP system landscape with the SAP HANA DB. For this, we meticulously examine your servers, storage, networks, backup infrastructure and your monitoring. The possible further steps of the project supply you with recommendations for the realisation and operation of the SAP HANA DB.

You converted your database to SAP HANA. Then it is time for the SAP S/4HANA Readiness Check of IT-Informatik, the examination and analysis of your system, if it has all requirements it needs for a shift from SAP R/3 to SAP S/4. We recommend doing this shift together with experienced consultants and to screen the frameworks of an implementation.