



TOP 5 CHALLENGES OF THE MILL INDUSTRY – AND HOW TO TACKLE THEM STRATEGICALLY

High volatility and extreme prices impose serious challenges for the mill industry.

Looking for the best way to handle them, this paper advocates a strategic approach. Because it can reach beyond mere troubleshooting by creating a systemic surplus.

THE STATE OF THE INDUSTRY? VOLATILE!

Remember the toilet paper crisis? The demand surged. Only to collapse shortly after, as many consumers had built up overstocks. Lockdown restrictions followed closely. They made online retail boom - and packaging with it. On the one hand. On the other, they tore apart supply chains. And made raw material prices skyrocket. Meanwhile, energy prices had hit rock bottom. And then they burned straight through the roof.

In a nutshell: We have seen a chaotic business environment, lately. Most of that chaos was caused by COVID and the war in Ukraine. And since both seem far from over, conditions are likely to stay unpredictable.

INTEGRATED SOFTWARE SOLUTIONS AS AN OVERALL STRATEGY

Facing that turmoil, troubleshooting was a priority for most players in the industry. But after years of "hot fixes", it might be time to step back and think strategically. Therefore, this paper is to show how integrated software solutions can be a systematic approach to tackle the challenges the industry is currently up against.

WHY INTEGRATED SOFTWARE?

There might be a variety of remedies for each obstacle listed in the following chapters. But only integrated software solutions can capitalize a "systemic surplus" along the way: Each piece of data entered into

an integrated application strengthens the data base of the overall system. And that system in turn makes its whole data base available for each application. Therefore, all tasks can be executed quicker, easier, and more precisely. In addition, concentrating on a single software and integrating as many functions as possible provides many other advantages:

- Single source of truth: different software systems might interpret or weigh certain factors differently, which makes their results incomparable and incompatible. A single source of truth guarantees full transparency through all processes, from order to cash.
- All integrations follow the usability of the overall software they are integrated in, which saves a lot of trainings and on-boardings.
- IT-support is easier to organize. Since all integration share the same structure, expertise is needed for one system only.

WHY INTEGRATING IN SAP?

Since SAP provides a very solid "backbone"-software used by many protagonists of the mill industry to organize their core business processes, it naturally sets a very solid ground to build a software landscape upon. That's why all T.CON products are based on SAP technology.

That said, it's time to take a look on how these integrations can actually help to overcome the major obstacles of the industry.

ENERGY & EMISSION PRICES

Major Challenge 1



An average paper mill uses the same amount of electricity as a city with 700.000 inhabitants. Hence, the impact of skyrocketing energy prices is severe. And so is the pressure to reduce emissions,

the EU has put on by its emissions trading scheme (ETS) and the carbon border adjustment mechanism (CBAM). Therefore, saving energy is inevitable.

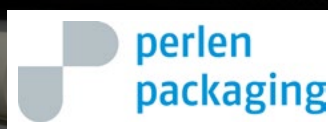
HOW INTEGRATED SOFTWARE CAN HELP: T.CON'S MES CAT

You can only manage what you can measure. Hence, tracking energy data is key to saving energy.

T.CON's MES CAT delivers data on energy consumption in real time. Which pays off immediately, as it allows to avoid energy waste during idle times, stoppages, set-

ups, etc. Furthermore, it enables to optimize production in respect to the contractual agreement with the energy provider. It identifies energy intensive grades and helps to schedule them accordingly at low-cost times. And it helps to avoid costly peaks in consumption.

SUCCESS STORY PERLEN PACKAGING



Perlen Packaging, one of the leading producers of blister packaging, had T.CON implement MES CAT alongside a system conversion to SAP S/4HANA. Thereby, Perlen increased its productivity by 5%.



Locations in 7 countries



approx. 450 employees



approx. CHF 162.3 Mil. turnover



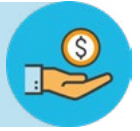
Mill Industry

PROJECT DESCRIPTION

- Conception and process design
- General contractors for the implementation of SAP ERP and MES CAT
- System separation during running production
- SAP S/4HANA system conversion

RAW MATERIAL PRICES

Major Challenge 2



COVID caused major hick-ups around the global supply chains, what led to extraordinary high raw material prices. And due

to sanctions and geopolitical power play, they are likely to stay that high.

HOW INTEGRATED SOFTWARE CAN HELP: T.CON'S TRIM SUITE

T.CON's TRIM SUITE lets you manage trim optimization within the SAP Business Suite, fully integrated in all SAP Standard planning tools. Covering production reels and sheets as well as profiles and rods,

it calculates optimized cutting plans with adjustable optimization goals. By reducing waste, it can save a lot of raw material, no matter if paper, film, packaging, metals, or textiles.

SUCCESS STORY

STEINBEIS PAPIER GMBH



Steinbeis, Europe's trailblazing market leader for recycled graphic papers, has been using T.CON's TRIM SUITE for five years now. Above all, it's convinced by the flexibility the solution provides: While it enables to reduce material waste close to zero, many other factors can also be taken in consideration: If a perfect trim causes laborious processes, TRIM SUITE includes those (and many other) dependencies in its calculations for the most cost-efficient process.



Approx. 300,000 t paper/year



Approx. 350 employees



Approx. EUR 190 Mil. turnover



Paper industry

PROJECT DESCRIPTION

- Seamless integration of TRIM SUITE into SAP ERP and SAP APO system
- Seamless integration of cutting plans into the MES CAT system
- 100 % SAP technology without external interfaces
- Constant adaptation to new requirements possible
- Real-time information for controlling and sales division

PERSONNEL SHORTAGES

Major Challenge 3



In a situation of scarce labor due to the demographic situation, COVID quarantine regulations and sick leave can cause

drastic shortages of personnel, whenever infections spike.

HOW INTEGRATED SOFTWARE CAN HELP: T.CON'S WORKFORCE MANAGEMENT

T.CON's WORKFORCE MANAGEMENT can help to optimize the deployment of your available workforce. It assists in detecting shortfalls quickly, supports keeping track of attendance and helps processing leave

requests or on-call duty. This way it can aid compensating unplanned deficiencies. Since WORKFORCE MANAGEMENT is fully integrated into SAP, it has immediate access to all data necessary.

USE CASE 1

RESPONDING TO UNPLANNED ABSENCES



A machine operator reports in sick. The shift leader uses WORKFORCE MANAGEMENT to identify the machine where the operator was scheduled to work. There is no replacement available in this production area, but there is someone available in another area. WFM requests this person and the machine has an operator.

USE CASE 2

RESCHEDULING AROUND BOTTLENECKS



Another machine operator is absent, but this time there is no one available who can cover, even in other production areas. The production manager checks whether the order can be postponed and updates the schedules to exclude this machine. Since the reschedule was done in plenty of time, the operator's absence doesn't turn into delivery problems.

USE CASE 3

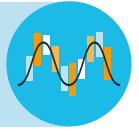
IDENTIFYING AND SCHEDULING EXPERTS



A special order needs to be completed soon. The production manager uses WORKFORCE MANAGEMENT to search for experts with the relevant skills for that production process and plan the shift, including cover, if necessary. With our workforce management software, the production manager can search for experts throughout the whole company.

DEMAND SIDE VOLATILITY

Major Challenge 4



There has been a trend towards smaller batch sizes and a growing demand for individually produced solutions for quite some time now. Additionally, the special effects of COVID and the ongoing geo-

political tensions keep triggering sudden surges in specific demands, which can be followed by corresponding declines at any time. Those developments make reliable cost estimations essential.

HOW INTEGRATED SOFTWARE CAN HELP: T.CON'S PLC-COCKPIT

Thanks to its integration in SAP ERP & S/4HANA, T.CON's PLC-COCKPIT can track the whole lifecycle of a product. It makes all costs transparent, from idea

to delivery. And by integrating all departments into one tool, it offers a single source of truth, which speeds up calculations on the profitability of every customer request.

SUCCESS STORY

HBPO



The automotive supplier HBPO, global market leader for highly integrated front-end modules, used to do product life cycle calculations in MS Excel spreadsheets, outside of the SAP software. Accordingly, data often had to be copied back and forth. And the transparency was correspondingly limited.

The PLC-COCKPIT has noticeably improved the quality of the data and the product lifecycle costing has become transparent. Thanks to its flexibility, the PLC-COCKPIT could be easily adapted to the specific process requirements of HBPO.



Locations in > 30 countries



Approx. 2,800 employees



Approx. EUR 2 Bil. turnover



Automotive industry

PROJECT DESCRIPTION

- Seamless integration of PLC-COCKPIT into SAP ERP
- Product costing throughout the cycle from development to production
- Centralization of all necessary data into SAP
- Efficient, transparent and site-independent processes
- Adaption to HBPO's special process requirements for feasibility studies
- Seamless interaction between the PLC-COCKPIT and the SAP project system

CYBER ATTACKS

Major Challenge 5



Cybersecurity is another area, where long term developments have been condensed and amplified: COVID 19 has shifted a lot of business activity into the virtual space,

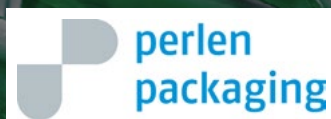
where it can be attacked and financially exploited by criminals. The geostrategic tensions further added political motivations for such attacks.

HOW T.CON CAN HELP: 24/7 MONITORING

An experienced data host like T.CON has preventive measures in place, that block non sophisticated attacks right away. And even if a highly sophisticated attack gets through, it's detected immediately by spe-

cialists of our 24/7 monitoring service. Since the first hours of a cyber-attack are the most decisive, our service will immediately mobilize all resources to minimize the damage being done.

SUCCESS STORY PERLEN PACKAGING



T.CON's 24/7 monitoring team detected a cyber-attack on Perlen Packaging's systems at 1 am. That early notice was one of the key factors that helped Perlen's IT specialists to fend off the attack successfully and avoid long downtimes for its production.



Locations in 7 countries



approx. 450 employees



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Mill Industry

INTEGRATED SOFTWARE SOLUTIONS – FOR WHATEVER COMES NEXT!

Having laid out how integrated software solutions can meet the present challenges; we would also like to provide an outlook on how they can be helpful by overcoming the obstacles of the future. But as mentioned in the introduction, the situation remains highly volatile. And it seems hard to forecast, over which hurdles the mill industry must jump next. Therefore, the only way to prepare for the future seems to become flexible: If you can't foresee new conditions, you need to adapt to them once they manifested. But it's still better to do so quickly and smoothly, instead of slowly and troubled.

Thereby integrated software solutions can be very helpful. If all key business processes are integrated into a single software system, you only need to adjust it to the new parameters of a changed business environment once. And all integrations will automatically fall in place. If e.g. costs of any kind rise or fall, you may just adjust your SAP software. And the PLC-COCKPIT automatically adapts them for your product life cycle costing. While MES CAT, TRIM SUITE and WORKFORCE MANAGEMENT will optimize your production cost according to the new prices of raw material, energy, and labor.

This way, steering your business through uncertainty will remain a rough task. But at least you will be prepared in the best way possible.

You would like to know more?

Contact us!



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