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Strategy
Traditional Distribution Models Face Disruptive Forces, Expert Statements on Chemical Online Marketplaces

Distribution
Impact of Digitalization on Distributors, Chemical Distribution in CIS Countries, Market Trends and Challenges

Logistics
Pharma Logistics in Asia, Future of Rail Cargo, Sustainability Efforts in Chemical and Pharma Logistics

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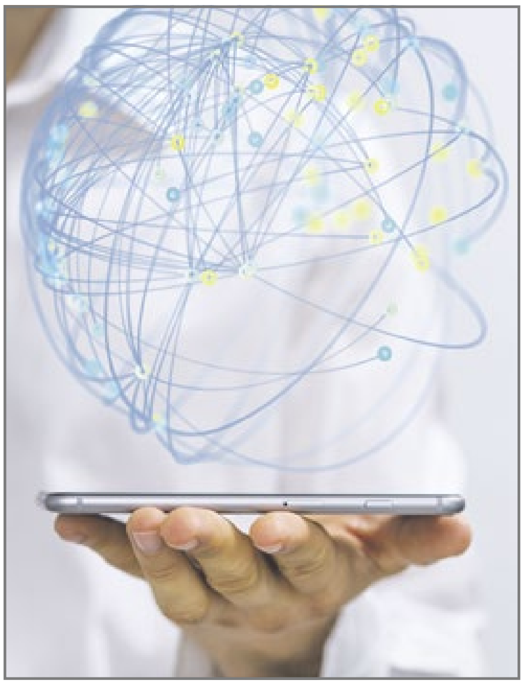

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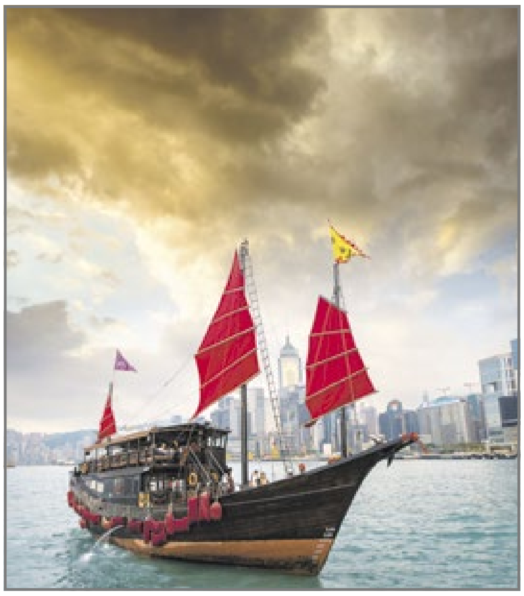

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Distribution

Logistics

Chemical Distribution 4.0

The Principal, Distributor, and Customer Perspective on e-Commerce Platforms in the Chemical Industry

"68% of chemicals worth $76 billion will be sold online within the next five years." This was the message from leading market research institutes and consultants in 2000, at the start of the new millennium. Most people believed that ChemConnect, CheMatch, Elemica, and other online platforms would transform the chemical industry.

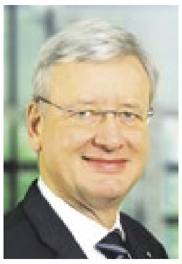
Now, almost 20 years later, we can see very little evidence of this. More than 90% of all chemicals are sold directly or through traders, agents or distributors, but not over online platforms.

Why is it that most chemical companies continue to buy and sell their products the same way they did two decades ago? Why are they forgoing the power and convenience of online platforms in favor of e-mails, faxes, phone calls, and handshakes? Why don't they listen to their consultants? Haven't they felt the urgency to "digitalize and optimize" like so many others have done, especially in their customer industries? Don't they see the fundamental power shift from principals to customers in the chemical distribution supply chain?

C2B Replaces B2B and B2C

Suppliers no longer approach the market through trade shows, marketing activities, and active sales. Customers increasingly search online and initiate digital contacts via websites, blogs, social networks, search engines, and commerce platforms. The principals and distributors they do not find online are no longer present in the relevant markets. Principals and distributors who miss this train should not be surprised that others are taking all the organic growth. Besides this risk of not being digitally visible there is also a strong trend of existing customers to increasingly require platform services. There is a latent risk of those customers migrating elsewhere over time if their principals or distributors are not responding properly to their request for digital convenience.

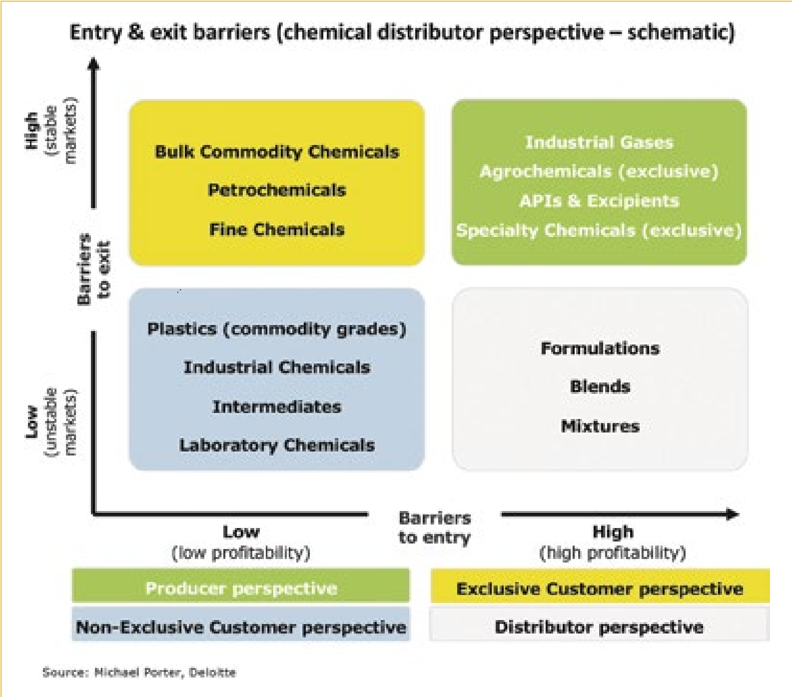
What do we mean by digital convenience? Product availability and the assurance that the product will be delivered on time, in full, and in compliance with specifications are the two most important buying criteria for most customers. Convenience, rather than price, comes third. The advantages of providing online convenience are quickly progressing. Take, for example, the purchase-to-pay or order-to-cash processes with principals or customers. The era of phone calls, faxes, and e-mails is nearly over, and orders will increasingly be handled through automatic order



Wolfgang Falter,
Deloitte Consutling

scanning and recognition (e.g., optical character recognition – OCR), directly via machine-to-machine portals (e.g., electronic data interchange – EDI) or over self-ordering commerce platforms.

It is estimated that almost all principal- and customer-centric processes will become "touchless" and digital. This will allow for quick product availability and credit status checks, prioritized product allocation in accordance with predefined business rules, and automatic delivery date confirmation. Picking, packing, shipping, and tracking will be done online and self-invoicing with payment tracking will become standard procedure. A supply chain "control tower" with a "management cockpit" allows for real-time visibility, reporting, and controlling. This will provide many advantages for the participants in the chain.



Conditions Specific to Chemical Distribution Require Manual Interventions

Seamless, integrated end-to-end supply chains all sound well and good, but why have we seen only a few, isolated solutions in the market so far? In chemical distribution, unlike other online retail categories, there are specific obstacles. The quality of master data tends to be rather poor and the complexity of product attributes, regulatory requirements, specific packaging, delivery terms and conditions, and many other detailed needs is high. There are rarely standardized orders, a situation that gives rise to

"68% of chemicals worth $76 billion will be sold online within the next five years."

the need for manual intervention in order to compensate and ensure a fit with a distributor's system requirements. In many cases, the product is not available at the right time, in the right place, and with the right packaging.

This in turn leads to many manual interventions and adjustments. Automated blocks are frequently applied to orders, examples being order limits, delivery blocks, credit checks/holds, etc. These also require manual intervention. What is more, there is often no internal agreement on how to deal with principals or customers that do not abide by the agreed terms and conditions. Last but not least, good use of best-in-class digital tools for further automation is often lacking. The complexity and the resulting frequent manual interventions are the real show-stopper. The effort to automate only pays off for readily available standard products with high order frequency. Thus, it is no surprise that Amazon-Business, 1688 by Alibaba, and other online retailers focus on laboratory chemicals, consumables, standardized fine chemicals, and maintenance, repair und operations (MRO) services first, rather than on specialty chemicals or hazardous bulk chemicals. Automation will become cheaper, but a large part of the chemical distribution, where automation costs are not in proportion to the expected benefits, is expected to remain.

Survival Chances of Online Platforms are Much Higher than 20 Years Ago

Currently we can observe a wave of new chemical online platforms, some of which are managed by chemical companies (e.g., Asellion by Covestro, OneTwoChem by Evonik, CheMondis by Lanxess), chemical distributors (e.g., DigiB by Brenntag, ChemBid by Büfa, ChemPoint by Univar), online retailers (e.g., 1688 by Alibaba, AmazonBusiness), and new Startups (e.g., Agilis, Carbanio, ChemNet, Chem-Space, GoBuyChem, Kemgo, Kemiex, Molbase, and Pinpools).

Will they suffer the same fate as those Start-ups 20 years ago? Today, the chances of success are significantly higher because the Internet is an everyday tool for most of us. Furthermore, bandwidth and computing power are much bigger and cheaper than ever before. Additionally, the power of principals is declining as the structure of the chemical industry becomes increasingly fragmented, offering a wider variety of supply sources. China is approaching 40% of the global share of chemicals supply. Last but not least, there is a plethora of digital on-premises and cloud solutions to overcome interfaces in IT systems and architectures within companies and end-to-end from principals to distributors to customers.

Data analytics supports planning, and wireless transponders on smart pallets enable track and trace – also for disaster recovery and business continuity. Blockchain technology has the potential to be used in direct financial transactions, peer-to-peer, without intermediaries. So why hasn't the chemical industry jumped on the digital bandwagon yet?

What is impeding people from investing in chemical e-commerce platforms is the money. What is preventing current players from being more successful are the high barriers for both entry and exit of existing players in the distribution chain. Let's look at both.

Building and Maintaining an e-Commerce Platform Is Complex and Expensive

Despite the above-mentioned advances in digital technology, building and maintaining an e-commerce platform is complex, difficult, and expensive. Medium-sized companies and start-ups often lack the resources, expertise, critical mass, and practical knowledge to design, develop, test, launch, and maintain a fully equipped e-commerce platform. Besides experts in chemical distribution, they need software engineers, security experts, user interface designers, test engineers, and many more specialists. Even if they are able to bring together and orchestrate such a multifunctional team, it takes at least a year and a half to two years to develop the strategy, select the right staff and partners, acquire the tools, and then build the actual product. By then, technology has moved on and needs have changed. It is difficult to justify the cost, effort, and time to develop what the software industry calls a "minimum viable solution" which may never deliver the desired value and then requires more investment and more time.

While large principals may have the resources and have built online platforms, these were either made for their own product portfolio or outside their portfolio. In the first case, customers are not likely to shop on several suppliers' portals to find what

"There will most likely not be one 'Chemazon', but a variety of successful solutions."

they need, and in the second case it is difficult to believe that those commerce engines are built altruistically without benefiting the principal's own product portfolio and sales. In both cases, building an online platform is not the core competence of a chemicals producer.

Others are building the platforms with the goal of digitalizing existing supply chains and established business practices. This limits risk and increases acceptance, but it falls short of what digitalization can do to make processes better and cheaper.

Many off-the-shelf online solutions are not able to support the different needs of the chemical buy and sell processes. They work only as an online product finder or an online agent/trader for spot volumes. A commercial transaction currently works only if it is a truly standardized product (e.g., standard packaging, lot sizing, payment terms, minimum order value, transparent prices plus surcharges, online ordering only,

Continued Page 6 ▶

touchless order fulfillment, and e-services only). Giving guarantees (e.g., supply security, sampling, claims management, onsite support) is currently more an exception than a rule.

Barriers to Entry and Exit Impede Rapid Adoption of Online Platforms

Chemical producers typically face high entry and exit barriers. Entry barriers are physical dependencies (e.g., pipelines, Verbund effects, access to qualified warehouses, production assets, means of transportation), favorable infrastructure (raw materials, energy, economies of scope, sufficient capital and skilled people), high regulatory requirements (license to operate, registration, general compliance, tariffs and duties), and switching costs (exclusive distribution and supply agreements).

Customers typically do have low entry barriers; however, for those products purchased under exclusive distribution rights or which are single-sourced, exit barriers are high.

Chemical distributors typically face low entry and exit barriers, but there are significant exceptions, namely if they:

- have exclusive supply agreements or sole supply customers;
- formulate, blend, and mix products tailored to their customer needs;
- provide application technology or product development services;
- organize the return of packaging materials or provide recycling or waste management services;
- provide financing or vendor-managed inventory solutions;
- provide regulatory services to help their customers remain compliant;
- carry out fourth-party-logistics (4PL) services;
- provide quality, environmental, health, or safety management services.

In a Digital World, Chemical Distributors Need to Become More Customer Centric

In the current market environment, chemical distributors that have focused on exclusive distribution rights with key principals have, on average, achieved faster growth and, especially, higher profitability than others.

This focus on exclusive distribution rights with key principals should be maintained, but the differentiation in a digital world is at the customer end. Investing in customer centricity, i.e., fulfilling the needs of customers for online services (e.g., product finder, easy sample ordering, online tutorials, track-and-trace functionality, touchless ordering and processing, online reporting, and improvement proposals) should be the focus of chemical distributors going online.

There will most likely not be one “Chemazon”, but a variety of successful solutions:

Principals will operate their web shops around their differentiated top products, cross-selling complementary products and services online (e.g., online system houses for polyurethanes).

> *“Survival chances of current online platforms are much higher than 20 years ago.”*

Logistics providers will offer end-to-end supply chain services in bulk products (liquids: acids, lyes, solvents; and solids: fertilizers, salts, oxides, sulfur) and develop the missing sales services either with Start-ups/internally or in collaboration with e-retailers, such as AmazonBusiness and 1688 by Alibaba.

E-Retailers will focus on non-hazardous, factory-packed C-products that enjoy regular, frequent demand (e.g., small quantities of lab chemicals, consumables, process chemicals, etc.) where hazardous materials regulations are still manageable. For bulk products they will cooperate with logistics providers.

Start-ups will offer online product finding services (“who supplies what?”), conduct auctions, and become a matchmaker to substitute the traditional trading and drop-ship businesses, especially for spot, bulk chemicals. They could also be the neutral commerce platform for multiple mid-sized chemical distributors or complementary principals. Consolidation may come as well, but at a later stage in the lifecycle of business digitalization.

Chemical distributors will operate joint web shops with their principals, especially where they have an exclusive distribution agreement in place. They will focus on industries and application markets and offer online marketplaces where customers need different products from different principals (e.g., coatings, adhesives, sealants & elastomers (CASE), textiles, leather & paper chemicals (TLP), life sciences (food & feed ingredients, agrochemicals, pharmaceuticals), cosmetics, care chemicals, water chemicals, etc.). They might not do that by themselves, but as a subscription service to a start-up or another platform.

> *“Those who have the money to build an online platform do not reap the benefits.”*

Wolfgang Falter, Global Chemicals leader, Deloitte, Duesseldorf, Germany

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Elemica, Centrifuge to Build Blockchain-based Finance Service

Elemica, a digital supply network for the process industries, announced a partnership with Centrifuge to create a blockchain-based visibility and financing service.

The partners are addressing the specific challenges and use cases of blockchain technology for the supply chain industry. The partnership allows 3rd parties to leverage the technology to build, host and use their own blockchain applications, smart contracts, and functions on the blockchain, which will benefit all users of the Elemica network.

“The process manufacturing industry is evolving by seeking an interconnected approach between Blockchain technology and their current focus on Industry 4.0 and digital transformation initiatives,” said Arun Samuga, CTO of Elemica. “As such, different participants in the supply chain can trigger participation through a blockchain solution if their activities are modeled through distributed ledgers and smart contracts. This makes supply chains more efficient and more resilient to risk by enabling end to end visibility.”

Centrifuge is working with Elemica to build a network and collaborative space to solve the challenges of decentralized finance.

Both companies will work together to enable supply chain finance, improve supply chain processes and explore various additional use cases, making transactions more manageable and easily authenticated.

Centrifuge, through their open and decentralized blockchain-based protocol, which connects the global financial supply chain, provides access for all network participants to those services. (rk)

Harke Group Buys two Chemlink Businesses

German chemical distributor Harke Group has acquired Chemlink Specialities and Addi-Tec, both part of the Manchester, UK-based Chemlink Group.

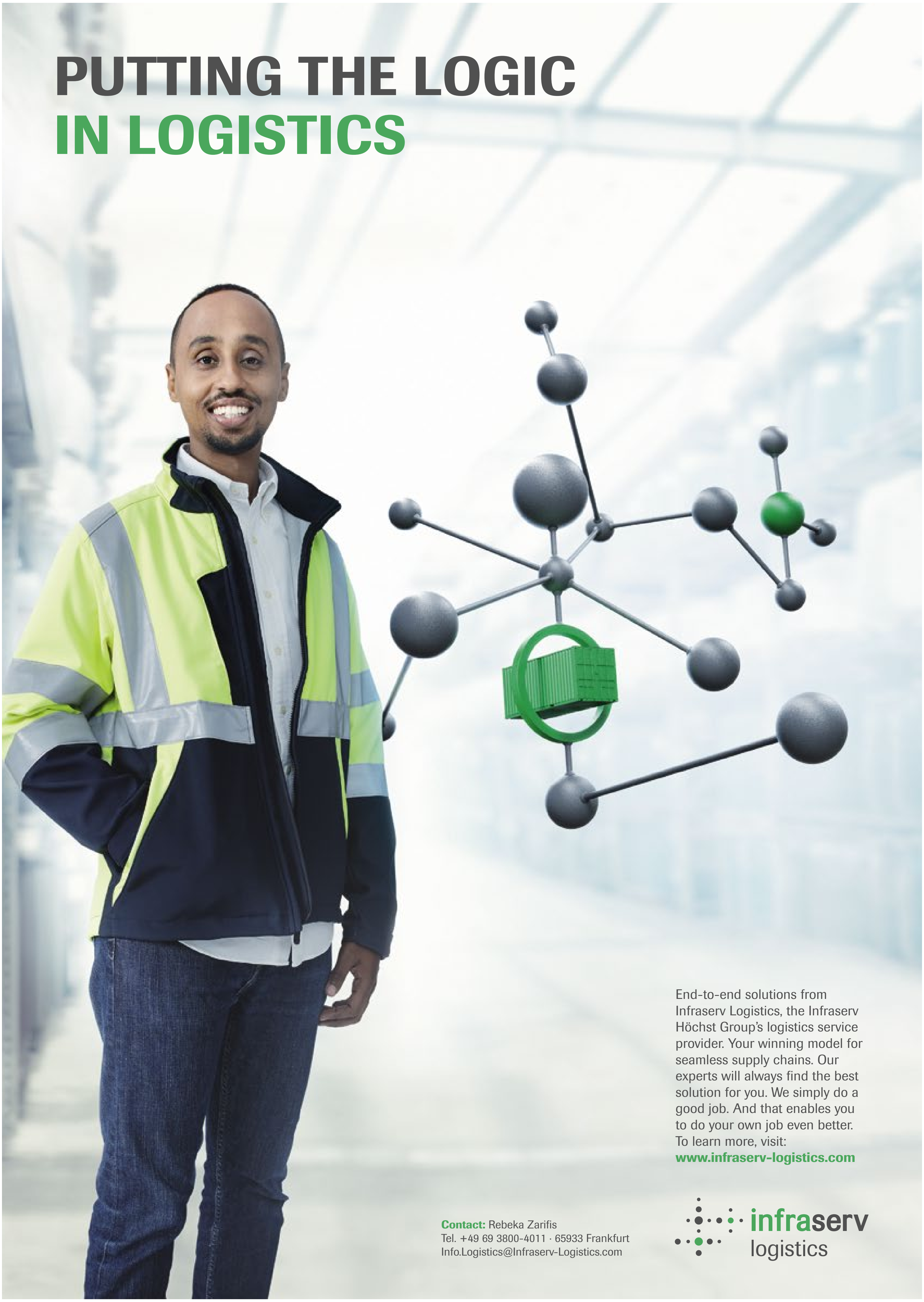
Through the acquisition, the family-owned group based at Mühlheim an der Ruhr said it will gain a strong UK base and will be in a position to expand the portfolio of products and services the two British companies currently offer customers. Among other things, Harke said it plans to add lab space at Manchester.

Chemlink Specialities is a distributor of specialty chemicals in the UK and Ireland with a focus on household and industrial products as well as pharmaceuticals. The Manchester firm with its own on-site lab facilities offers services such as formulation development, reformulation, micro testing and performance testing in addition to providing regulatory advice, sourcing and samples.

Additec is a distributor catering to the paints and coatings and the plastics processing sectors, providing some of the same services as Chemlink Specialities.

Acquiring the two companies is another important step in Harke’s strategy of offering customers and principals “an excellent and innovative commercial, logistical and technical service throughout Europe, Russia and Turkey,“ said group president Thorsten Harke.

The German distributor, which by its own account ranks among Europe’s top 50 such companies, has production sites in Germany and Hungary and a broad portfolio of products for the life science industries, including pharma, food and cosmetics. (dw, rk)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Digitalization in Chemical Distribution – a Reality Check!?

Survey: Current Focus for Many Companies is on Laying a Proper Groundwork for Digitalization

Over the last few years there has been a lot of talk about digitalization, also in chemical distribution. Particularly the developers and financial backers of dedicated online e-commerce platforms and marketplaces have promoted their ideas and concepts wherever they found an audience of chemical producers and chemical distributors willing to listen to their point-of-view about the ultimate fate of intermediaries from the real world.

Within the chemical distribution community this has led to a lot of discussions about how best to tackle the topic of "digitalization". What needs to be done in order to survive in an increasingly competitive environment and how to cope with the threat of a possible disruption caused by new and innovative digital developments, either initiated by suppliers, other distributors or disruptors from outside the industry itself, are questions that await practical answers.

Collecting Robust Data

As nobody is really sure about the best way forward and also to address the lack of data available on what initiatives companies really take in this context, DistriConsult in cooperation with CEO and value creator Phil Allen at Customer Value Management (CVM€) conducted a survey amongst more than 200 chemical distribution companies in Europe. The web-based survey, which was open during the month of March 2019, was answered by 57 respondents, equivalent to a response rate of more than 25%.

Answers came from all kinds of chemicals distribution companies, ranging in scope and size from privately held enterprises with a few million euros in sales to listed multinationals with hundreds of millions and even billions of euros in sales. Also, the geographic spread was quite broad. Overall our sample was quite likely a bit skewed towards specialty chemicals, as a lot more distributors are active there than in industrial chemicals where a few large groups tend to play a more prominent role. The individuals who answered the questionnaire were typically owners, CEOs, COOs, IT directors or business unit heads. The survey yielded some interesting results, the most salient parts of which are summarized here.

We also conducted qualitative interviews with a select number of producers to elicit their views and approaches to digitalization within their own companies and with their distributors.

Günther Eberhard, DistriConsult

Jürgen Mohrhauer, DistriConsult

Relevance and Drivers of Digitalization

Digitalization is clearly a relevant topic for the companies covered in the survey. On a five-point scale ranging from -2 (not relevant at all), over -1 (not relevant) to 0 (neutral) on to +1 (relevant) and +2 (very relevant) the compound score was +1.27. Digitalization is certainly a relevant topic to the respondents in our sample.

Drivers behind the digitalization efforts are in essence two-fold: market penetration and growth and internal efficiencies (cf. fig. 1). Two thirds (66.7%) of respondents said they want "to generate new business opportunities and grow sales". Second and third were "to enhance operational efficiency" (63.2%) and "to simplify structures and to reduce cost" (61.4%). Other drivers were "to enable value pricing/ enhance value creation" (29.8%), "to gain a deeper understanding of customer/market needs (e.g. "data mining")" (28.1%), and "to increase internal transparency" (24.6%). All other answer options provided, including "to pre-empt principals" gained only significantly lower scores, at or below 15%. The overall objectives of digitalization are mixed. Some are outward-looking, market and growth related. Others are inward-looking and hence cost/performance related.

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Getting the Basics Right

When asked what has been done so far and/or what projects were in the pipeline, it became clear that the current focus for many companies is on laying a proper groundwork for digitalization.

Re-engineering internal processes (63.2%), a re-design of the company website to enhance find-ability and search-ability (61.4%) and an upgrade of the Customer Relationship Management (CRM) system (57.9%) were the three most frequently mentioned initiatives. Joining an e-commerce platform (or marketplace) was mentioned by 17.4% of the respondents, yielding position no. 9 amongst the 14 answer options. The total number of answers given would suggest that the average number of sub-projects is around 4.3 per responding company (multiple answers to this question allowed).

To Join or Not to Join, that's the Question

When we specifically asked a question about online platforms/marketplaces, it turned out that proponents and detractors are almost evenly split. 46.4% of respondents saw "joining a platform/marketplace and doing business on it as a viable way forward" for their company. 53.6% thought that for their company it was not. The "yes" answers gave "addition to the existing marketing approach" (28.5%) and "addition to existing procurement/purchasing approach" (30.8%) as the main reasons for their positive view. Only one in five respondents saw this step as a "question of survival" or had the opinion that "all (distribution) business will go that way in the future".

Of the respondents that did not consider platforms/marketplaces worth joining, 60% said it was simply "not part of my company's strategy". Some said a lack of resources prevented them from doing more in this direction.

Those that had joined a platform (10 out of 57) said they wanted to sell products on it (90%). The second driver was the desire to buy products (60%), followed by advertising/promotion (40%) and the intention to use it for market research (30%) (multiple answers to this question allowed).

Distributors are well aware of the platforms/marketplaces and other digital offerings that exist in the chemical industry space like specialist search engines or meta crawlers. The most "known" website was 1688.com (operated by Alibaba), followed by GoBuyChem, Pinpools, Kemgo, Kemix (so far only a project) and Kemiex. Many respondents were also familiar with the search engine ChemBid and material selection platform SpecialChem. Actual business has been done on 1688.com, GoBuyChem, Kemiex and Pinpools (cf. fig. 2).

"Joining is easy, but it takes time to do business on a platform or a marketplace."

Companies that have registered on a platform/marketplace have done this on average with 6 providers. This would suggest it is relatively quick and easy to take such a step. Generating actual business seems to be a bit more of a challenge or may take more time. 40% of the registered companies had not yet done any business on a platform, 40% less than 9 transactions and 20% between 10 and 49 transactions so far. The average time that had elapsed between registration and the first transaction was almost 6 weeks on average.

Interaction with Suppliers

Distributors are unlikely to digitalize their business in a sort of commercial vacuum. So, we asked about the relationship with their principals when it comes to digitalization. Almost half of the respondents described this as "we are learning and following" (45.1%). Some are jointly working on developing a "digital channel" (10%). And 17.6% think they are ahead of (many of) their principals, when it comes to digitalization.

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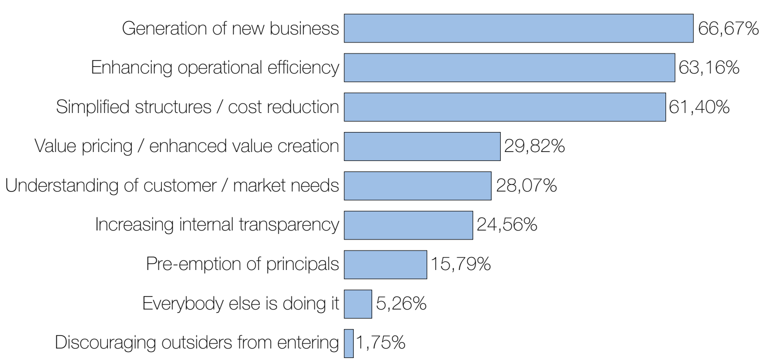
Distributors are currently focussing on laying the groundwork for a digitalization of their business

Figure 1

Main Drivers (multiple answers possible)

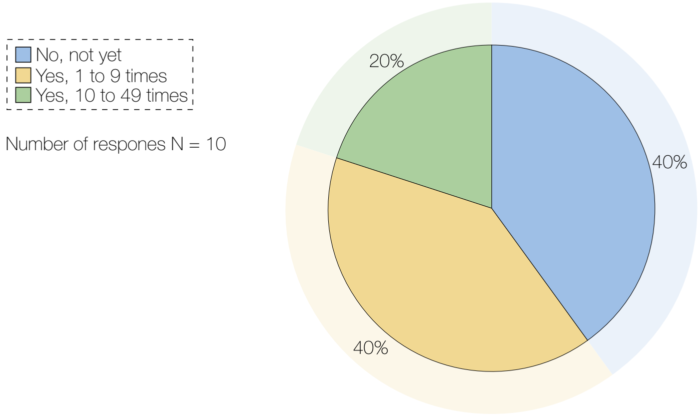


Source: DistriConsult survey analysis © CHEManager

Sales transactions by distributors on plattforms/ marketplaces are less frequent than one might think

Figure 2

Successfully initiated / concluded transactions



Source: DistriConsult survey analysis © CHEManager

Activities and Views of Chemical Producers

In parallel to the web-based survey of distributors, our cooperation partner CVM€ conducted several structured interviews with a select group of chemicals and/or polymers producers regarding their views on digitalization. To the companies interviewed, digitalization is a highly relevant topic. These companies have identified as the main driver the opportunity to grow [direct] sales, improve the customer experience with the development of new business models, and also to achieve internal operational effectiveness improvements. In that sense the answers were very similar to the findings for distributors.

"Distributors are unlikely to digitalize their business in a sort of commercial vacuum."

The updating and improvement of the CRM system is seen as a fast way to address internal issues. Website redesign and advanced analytics (using data from a web-interface, tracking leads etc.), and also the implementation of "web-shops" (including on-line payment) are high on the priority list. Another focus area is an easy-to-attain enhanced "social media" visibility.

Joining a platform was mentioned as a viable option "in general" by most of the interviewees. But there were also some reservations mentioned, also in the sense of "we are not there yet". Only if a direct addition to existing business can be expected, does it become an attractive proposition. Suppliers are "observing and studying" this possibility, but limited standardization and a lack of track record have hampered a decision for some of them so far. If there would be a low-cost opportunity to have an own platform (e.g. through a global initiative on a larger scale), this would be the favored approach.

The suppliers interviewed typically expect to have an extensive and effective dialogue with their distributors regarding new channels and approaches through digital means. While they recognize that distributors will have to determine their own strategies, ideally these should be in-line with the suppliers' approach in terms of customer interactions that have an impact on the relationship between supplier and distributor. The attitude was that those distributors, who can keep the pace and are in-line with expectations, will have enhanced opportunities.

Besides all the initiatives on digitalization there still is a need for the "personal touch" in certain sales interfaces, as technical and face-to-face discussions for many products are considered to be very important for mutual value creation, even in today's digital world.

One of the biggest challenges to producers appears to be the logistics part of the sales transaction, where distribution will continue play a key role for the foreseeable future. Any alternative or additional channel needs to have equal or better performance or enable a new and better customer experience.

What to Make of it?

When it comes to digitalization, distributors currently are mostly active in laying the groundwork within their own organizations. Re-engineering processes and upgrading the IT infrastructure, in part or sometimes in total, are key project activities here. Developments outside of their companies, such as platforms, marketplaces and search engines are closely monitored and analyzed. Various distributors have taken the step to register on platforms/marketplaces and, of these, some have already done business on them.

Overall the rate of adoption seems to be slower than some pundits expected and developers of digital solutions and platforms would like to see. Also, the distributors that have taken the effort to register their companies and products might be rather disappointed. Maybe it's just a question of elapsed time before this takes off. However, it could also be that specialty chemicals after all take more technical expertise (and time) to sell indeed. Hence it might be more difficult to market such products through a "digital channel". Also, the number of sales transactions for each product/customer combination is often low for a typical distributor anyway. Hence economies of scale are more difficult to obtain than in a B2C setting, where most of the success stories in digitalization are rooted. So far, the end-to-end 'digital distribution model' still seems to be more of a theoretical option, yet to be proven reliably in practice. On the other hand, the slow pick-up could also be a sign that companies are afraid of cannibalizing their existing business model and making (commercial) infrastructure investments obsolete. The incumbents have just not been consequent enough in their efforts to-date.

"Besides all the initiatives on digitalization there still is a need for the 'personal touch'."

However, the good news is that initiatives regarding digitalization today are less costly than they were in the past. Initial subscriptions are free or carry only a low fee, and IT infrastructure can often be bought in 'as a service' on very short notice. It is no longer required to make extensive investments in hardware like servers or data storage. In that sense, experimentation is possible and the associated risks can be managed even by small and medium size firms. So, stay tuned, it continues to be interesting.

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The authors wish to thank Phil Allen, CEO and value creator at Customer Value Management, Zug (Switzerland) for his valuable contributions in setting up the survey and sharing insights from the interviews with a select group of chemicals and polymers producers he conducted.

Aceto Corporation to Divest Chemical and Ingredient Distribution Assets

Aceto Corporation, the Port Washington, NY-based US company engaged in the development, marketing, sale and dis-tribution of human health products, pharmaceutical ingredients and performance chemicals, sells its chemicals busi-ness assets to an affiliate of New Mountain Capital (NMC).

After receiving a qualified offer from another bidder reflecting higher and/or otherwise better terms, a court-supervised sale process was held on April 12, 2019. Ultimately, NMC, a growth-oriented investment firm with over $20 billion in assets under management, was selected as the successful bidder.

Following its Chapter 11 bankruptcy protection filing in mid-February Aceto has also completed the previously dis-closed sale of the assets of Rising Pharmaceuticals to Shore Suven Pharma. (mr)

NRC Group Repositions as Nordmann

Multinational chemical distribution company NRC Group has repositioned its brand and as of mid-March is operating under the uniform name Nordmann. This step is part of a new and holistic strategy that the Hamburg, Germany-based distributor of chemical and natural raw materials – as well as specialty chemicals – has taken up in response to changes in the global market. "Expanding our international presence and repositioning ourselves under the unified Nordmann brand were the next two logical steps in our development as an internationally successful group of companies," explained Gerd Bergmann, Managing Director of Nordmann, Rassmann.

The new corporate strategy entails that in future, all of its associated companies will be presenting themselves under the name Nordmann. (mr)

Safic-Alcan Acquires Italian Distributor Castelli

Just shortly after Safic-Alcan acquired 100% of UK distributor Langley-Smith the Paris, France-based specialty chemicals distributor has taken 100% of Italian chemical distribution firm Luigi and Felice Castelli.

Established in 1868 and headquartered in Milan Castelli is a distributor with a focus on ingredients for the cosmetics industry in Italy.

Safic-Alcan has also acquired a majority stake in Castelli Food, an ingredient distributor specializing in the food and beverage sector that is providing ingredients such as yeast extracts, vegetable preparations, fibers, spices and herbs, and a full range of other organic products to the Italian food market.

"As part of our overall Life Science strategy, we see this acquisition as an important consolidation of our activities in the Italian market and we look forward to further building on this additional expertise with-in Safic-Alcan," Philippe Combette, CEO of Safic-Alcan, commented on the latest acquisition. (mr)

Suttons Takes Parts of DHL's Chemicals Business

UK transport company Suttons Tankers has agreed to acquire the domestic bulk commodity chemical business of DHL Supply Chain, part of Germany's Deutsche Post group. Financial terms were not disclosed.

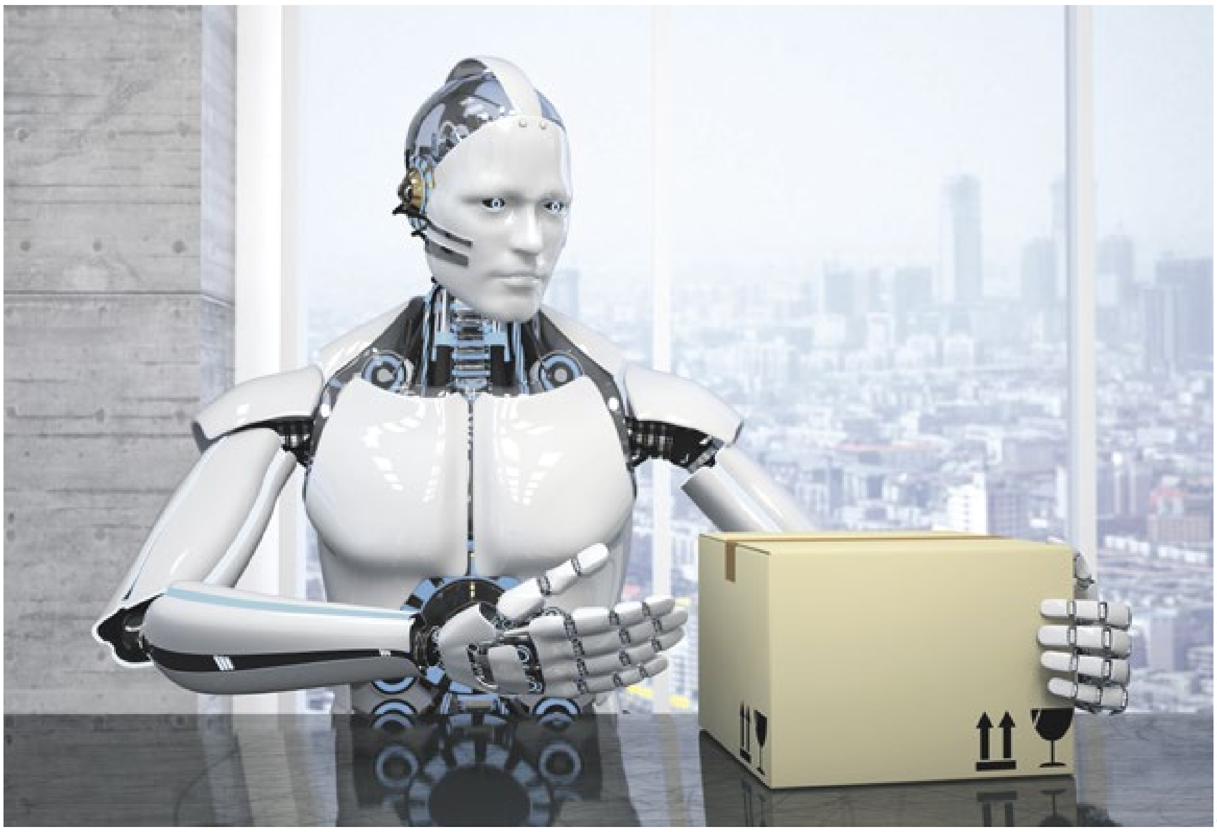
The acquisition primarily covers the transportation of chemicals from sites in Billingham, County Durham and Runcorn, Merseyside, in the UK. DHL will retain its dedicated services in packed chemicals, bitumen, lubricants and fuels. Commenting on the acquisition, Michael Cundy, managing director of Suttons Tankers, said: "We see DHL's bulk commodity chemical business as complementary to our existing offer and in line with our strategic commitment to this market."

Outside the UK, the Cheshire-headquartered company operates in continental Europe, the Middle East, USA and Asia, supplying transportation, logistics and other value-added services such as drumming and warehousing for the fuels, gases, chemicals and food sectors. (eb, rk)

E-Commerce Platforms in the Chemical Industry

How to Deal with a Possible Disruption Caused by Digital Innovation

Digitalization is a very important topic not only in the chemical industry as a whole, but also in chemical distribution. As Wolfgang Falter states in his article on page 4: Customers increasingly search online and initiate digital contacts via websites, social networks, search engines and commercial platforms. Those distributors that they do not find online are no longer present in the relevant markets.



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This development has led to many discussions within the chemical distribution industry on how best to address the issue of digitalization.

CHEManager asked executives and industry experts familiar with the development of e-commerce in chemical distribution to share their opinion on what needs to be done in order to survive in an increasingly competitive environment and how to deal with a possible disruption caused by new digital developments. We wanted to know:

❶ Will e-commerce platforms in chemical distribution be more successful today than CheMatch, ChemSystems, ChemConnect et. al. were 20 years ago?

❷ Who in the chemical supply chain from principal to distributor, logistics provider, online retailer, start-up to customer will be winners/losers in online distribution?

❸ What do you (either alone or with partners) plan regarding online distribution?

Read the insightful answers of the experts here.

Offering the Best Customer Satisfaction Will Be Key

Jouke Eijssen, director Digital, Nouryon

❶ Yes, we firmly believe e-commerce platforms will be more successful today than 20 years ago. At that time, platforms were a technology push. Nowadays online is so integrated in daily life and customers are experiencing the convenience of all kinds of e-commerce platforms (e.g. online shopping, hotel bookings) in their private lives that now we experience a behavior pull — and act accordingly. ❷ That is too early to say. We see a number of interesting initiatives, but we believe that offering the best customer satisfaction will be key. It is quite possible that different platforms will co-exist — for example, focused on a specific geography or customer group. ❸ It depends from where customers are in their buyer journey, but we see a clear trend of customers moving towards online. We aim to make it as easy as possible for our customers to do business with us, so we follow a multi-channel approach — for getting info, ordering, etc. We don't have plans for our own platform, but we have several online outlets. They allow us to keep track of changing customer behavior, and with that allowing us to tailor — and sometimes re-invent — internal processes to create more value for our customers, on- and off-line.

Digital Unicorns May Be the Winners

Hans-Jörg Bertschi, executive chairman (Board of Directors), Bertschi

❶ I am convinced that digitized B2B trading platforms — functionally integrated into the ERP's of the parties — will play a significant role in a not too distant future. They will facilitate and rationalize the trading and distribution of many chemical products and also tie in with supply chain and logistics platforms.
❷ This is a rather difficult question. First of all, the size of a party does not count too much. It is rather the level of digitized capabilities and the speed of the party which matters. Disrupting parties have very significant opportunities to win, but they run as well quite some risks. For example, in logistics, digital unicorns or established but digitized asset-based logistics service providers may be the winners.
❸ Bertschi is heavily investing in digitizing its global asset-based chemicals logistics service offering, as well as its non-asset based chemical freight management business, the latter running under the tradename Elite. We prepare ourselves to tie in with successful B2B digitized chemical distribution and trading platforms, enabling them to offer full supply and transport chain visibility.

Increasingly Important to Adapt to Changes

Peter Wilkes, managing director, Biesterfeld Spezialchemie

As technology has evolved rapidly over the last two decades, it is reasonable to believe that all of this will accelerate the use of trading platforms in the chemical industry. Reality confirms that our industry is more complex than others, leading to a different and broader role for chemical distributors: It goes beyond the purely physical distribution of products. While I see opportunities for platforms primarily in the management of back-office processes, I still doubt that platforms will play a leading role in the coming years. Of course, there will be several changes in our markets, and it is becoming increasingly important to adapt to changes, to be able to innovate and to offer services clearly, transparently and effectively. Those who adjust will have a chance to play, others won't. Having online services available is one element — but only one out of many.

We as Biesterfeld are very engaged in exploring several opportunities regarding online distribution. Much is about learning and validating how digital processes can help to better serve industry. There won't be the one and only magic solution for everyone, so we have to engage in several ways and see which offerings fit into certain segments of our business.

Compliance even via Online Sales

Markus Kanis, executive vice president Industrial & Chemical, Imperial Logistic

❶ Today, almost every product and service are marketed online, including chemicals. However, the chemical industry presents greater challenges as not every chemical product can be sold to every buyer. For example, the placing on the market and use of pesticides is governed by EU and national regulations; in Germany these include plant protection laws. Compliance must be ensured even via online sales. This impacts the potential scope and success of online marketing.

❷ Anyone could be a winner here, subject to satisfying compliance requirements. Sales and processes are simplified and accelerated, transparency and market overview for all involved grows. But IT is a key enabler in this area, and those who do not have the necessary competence will lose out to those who do have it.

❸ As logisticians for the chemical industry, Imperial Logistics will support its customers in their efforts to implement e-commerce projects, by creating the necessary conditions, structures and communication channels. At the same time, we are actively looking at ways to market our own services across various sectors via e-commerce platforms. For example, Imperial Logistics recently launched the innovative Sharehouse online platform, which matches available warehouse capacity with companies needing space.

Customers Need to Be Served in Multiple Ways

Hermann Bach, head of Innovation Management, Covestro

❶ Digitalization is becoming part of our daily lives — both professionally and privately. Different to 20 years ago when digital platforms were only rare lighthouse projects in an overall analogue landscape, we face today a much more digital-savvy environment. This change is being further accelerated by the fast-paced nature of technological developments and the omnipresence of digital technologies, in particular data, computing power and connectivity are readily available today. This progress holds enormous potential for digital B2B business in the chemical industry.

Many customers expect more flexible ways to interact and to do business, similar to the many digital opportunities in B2C business. In order to reach the customers at the right time in their decision-making process, successful B2C businesses serve them via their used and preferred channels. And while this practice has rather become standard procedure than competitive advantage in B2C, many B2B companies still need to learn how to establish a seamless experience across the multiple channels used by their customers. However, if you don't manage to serve your customers on the channels that they prefer to use, someone else will probably do. This is why we choose to serve our customers in multiple ways: on new digital platforms like the Covestro Direct Store and the flagship store on Alibaba 1688 as well as on our proven, traditional channels.

Creating the Most Convincing Customer Experience

Steve Holland, CEO, Brenntag

❷ Digitalization provides a significant opportunity to increase transactional efficiency and many integrated functions which enhance customer experience and create instantly accessible information in real time along with multiple application and points of reference from safety data through to formulation and practical help.

Today there are manufacturers who are developing digital solutions for their own products and services. The complexity to do this effectively in their current supply chain capability versus the use of existing distributor models is unlikely to drive a significant return as smaller consumers can present an even larger demand on logistic resources.

There are some smaller providers who are promoting digital marketplaces. Many of these are offering a consolidation platform on an "arm's length" basis without any obvious control or any investment in the supply chain. Control and investment in the supply chain underpins many of the essential aspects such as safety, traceability and security required to distribute chemicals and ingredients, many of which may be categorized as hazardous and have high regulatory controls.

Digitalization provides only one of several channels for customers to interact with suppliers and distributors in combination with other services such as technical support, formulations, mixing and blending which create further value added and require a personal customer contact. The winner in the race to digitalization will be the channel who creates the most convincing customer experience, and we at Brenntag have all the means to succeed.

Focus on Strengths and Think Outside the Box

Frank Schneider, managing director Germany, IMCD

❶ Digital or e-commerce platforms in chemical distribution are already more successful than their predecessors of 20 years ago and will continue to do so, on a significantly higher level than they do today. ❷ All stakeholders in the chemical supply chain can and will be winners in online distribution – if only they focus on their core strengths, are creative and prepared to think outside of conventional boxes. ❸ IMCD is assessing all online distribution options actually. Our assessment could lead to an offering of an own platform in combination with the participation at external platforms.

Combining Tailored Products and Services with User-friendly Design

Marko Grozdanovic, managing director, BTC Europe

Digital products and services have become an integral part of our everyday lives. The changes we see compared to only a few years back, for example, are huge. Today, we are ordering groceries online, have our concert tickets on our smart watch and pay using our smartphones. In the industry, this digital transformation initially did not progress as quickly as in the private sector. Meanwhile, however, in the B2B sector, the digital transformation has taken up full speed. Customers today increasingly expect the simplicity, flexibility and availability of online tools and services — which they know from private use — in the professional sector as well. Therefore, online platforms and services are no longer a phenomenon from the consumer world but are becoming an essential part of the B2B sector as well. And this time they come to stay.

This is why we at BTC Europe have started early on to work on digital solutions to foster new business opportunities and provide our customers the service and support they are looking for. One of these solutions is the BTC Webshop, a digital sales platform for our customers, which we are currently rolling out. It combines tailored products and services with a user-friendly design. Due to the complete system integration customers can benefit from real-time information and a seamless user experience. The rollout with more than 300 customers has already begun and the insights and feedback we are gaining is very positive and promising. We are deeply committed to follow this digital pathway as it provides new opportunities to support our customers' growth and clearly puts the customer at the center of our activities.

Shift the Focus towards Real Value-adding Activities

Sebastian Brenner, managing director, Chemondis

Looking at B2C, digitalization has led to major changes for both vendors and customers. Customers profit from higher information transparency about prices and potential vendors, as well as reduced efforts to purchase online. Vendors have dramatically increased their market reach and at the same time reduced their operational costs. They are now able to service customers all around the globe with even zero physical stores. We expect that this will also be the case for B2B in general and for the chemical industry in particular. In view of the current situation, the industry is very offline-focused and lacks transparency. It requires big time investments on the buyer side and high selling costs with a lot of market knowledge on the seller side.

Digital marketplaces like Chemondis make more information easily available for both sides. For chemical suppliers this means, just like in B2C, they can service global customers at lower costs. Less traveling, reduced sales and marketing efforts. With a highly increased reach through global marketplace networks, new buyers can be found online with virtually no cost. Both production and margins can be planned more effectively in the long run, with negotiations taking place online as well, documentation becomes faster and easier. The focus can shift towards real value-adding activities.

For chemical buyers there are two major advantages of digitalization: the first is increased transparency. With information about potential (or alternative) suppliers, availabilities and customary prices, buyers can take better-informed decisions and enter negotiations more consciously. Also, with all relevant suppliers being listed at one marketplace, the costs for research, phone calls and inquiries are reduced significantly.

At Chemondis we are sure that the time has come for digital marketplaces for the chemical industry. We are excited to be part of it.

Customers are Looking for an "Amazon" Experience

David Cahn, director Global Marketing, Elemica

❶ Yes. The e-commerce platforms for the chemical industry have evolved from platforms to "marketplaces." These new marketplaces such as Chemondis, Kemgo, Pinpools, and others, will be more successful than in the past for a few reasons. First, earlier platforms did not support the complex requirements of the back-end fulfillment needs between the platforms and the specific digital supply networks, such as Elemica. Digital supply networks that integrate the suppliers, buyers, and logistics service providers enable the tracking and tracing from the order placement through the shipment from the manufacturer to the customer. These new marketplaces also support the sophisticated contract specific pricing needs from each of the manufacturers and material specification needs of each buyer. This was much harder in the past. Finally, the buyer, who is more digitally aware, has also matured in their buying characteristics. Today, the typical chemical buyer is ordering products in amounts of 50K euros or dollars for an average shipment which was an uncomfortable amount to procure in the earlier days of e-commerce. As a result, buyers in the past preferred to order more closely with the customer service representative. Today, they are looking for a more "amazon" experience where they can order any product online and can track it from order through delivery and payment. These millennial type buyers want the same experience with their direct materials purchases that they can receive from the consumer purchases.

Improved Efficiency and Speed of Operations

Timo von Bargen, venture lead, Chemberry

❶ Not only are we seeing apps that improve chemical ingredient transparency for end-consumers, but we're also seeing new digital platforms that seek to better serve customers within the chemical industry. These customers hold the same expectations for B2B products and services as they do for the platforms they use in their private lives, be it Amazon or Alibaba.

What's crucial for the success of e-commerce and other digital business models in the chemical industry is for these companies to provide more than just a shiny new platform: they must also ensure that the operations under the hood — from supply chain to production to logistics — are also improved in terms of efficiency and speed. This is the only way that e-commerce and other digital businesses can truly take off in this complex industry.

❷ That's why we at Chemberry, borne out of chemical company Clariant, are working hard to understand the true needs of chemical suppliers and buyers. As a start we identified the early phases of the customer journey as critical and therefore built a search and recommendation engine that intelligently guides customers to the right chemicals. But to achieve an end-to-end offering we need to find collaborators that can help us address later stages in the value chain. For this reason, we are actively seeking strategic partners who are willing to shape a new and improved digital customer journey in the chemical industry with us.

Online Platforms will Ease the Process but not Replace Chemical Distribution

Robert Späth, managing director, CSC Jäklechemie

Digitalization is a hot topic in chemical distribution recently. Start-ups appear, and projects are launched on how to digitalize the business. I welcome every new idea to make the supply chain more efficient or to facilitate communication.

Our business needs experience of how to handle even critical products compliant and with responsible care. Distributors are already the keepers of an immense database. They manage to serve entirely different industry sectors with many special requirements. The secret of success is to meet the expectations of each of our customers. To digitalize processes and parts of the chain makes sense. This may

even include collaboration with platforms. Online distribution will ease the process for parts of the distributor's as well as the producer's business. It will not replace chemical distribution. The distributor is the customer's counterpart that knows how to pull the strings. This will need digital performance as well as product applications engineering and logistics. Such a high-level service opens access to markets. Producers recognize skilled distributors as valuable partners. Distributors must not ignore the challenge of digitalization. Otherwise, they may lose their customer base and move back to simple service providers.

Necessity to Pursue Multi-channel Strategies

Christian Bürger, managing director, Chembid

❶ The world that created the dot-com bubble 20 years ago has transformed into a world in which an online presence is required to succeed, also as a chemical company today. The number of internet users has grown enormously since then, dial-up internet made room for broadband technology, and mobile devices that are more capable than entire computers from 20 years ago appeared. Today's e-commerce technologies are more efficient and cheaper to implement than ever before. Instead of worrying about the failures from 20 years ago, industry professionals should turn their attention to the success stories of today. In China for example, the use of chemical business platforms is already widespread. Chemical B2B marketplaces have reached more than CNY 200 billion (about $30 billion) revenue in 2017, and we are also seeing strong growth in the number of successful platforms in other regions of the world. E-commerce platforms in chemical distribution are already more successful today than they were 20 years ago and will be more successful in the future.

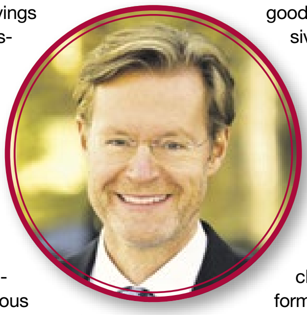
❷ I believe that in the future it will be less about where in the chemical supply chain a company is, but rather how much it is able to build a strong brand and brand experience via different digital environments. In today's and much more in the future web business, it is necessary to pursue multi-channel strategies in order to remain visible and thus relevant. We are now entering an age in which "distributed content" — information promoted in different environments through various channels — is more important than ever. Only in this way can the customers, who are predominantly digital natives, be reached at various relevant touchpoints and strong brands can be built up.

❸ We are operating a global metasearch engine for chemicals and plastics, making more than 2 million offers from a wide selection of marketplaces and webshops comparable for buyers. Suppliers can outsource online business activities with chembid and save both financial and personnel resources for e-commerce and digital marketing.

Extensive Services Need to Be Offered along with Products

Thorsten Harke, president, Harke Group

Pure online trading platforms, without the personal service and support that trading companies offer today, will probably achieve a certain market share in certain areas of the B2B sector. Today's trading companies, however, are per se already trading platforms "of the real world" that combine a broad product range for customers to save transaction costs for them. On the other hand, consulting and many other services of trading companies for customers at the same time save considerable transaction costs for manufacturers. If products are offered purely online – without consulting and service – these transaction cost savings are considerably lower for customers and suppliers.



It will therefore usually not be sufficient simply to post products online. Many products do not sell by themselves, but there are extensive services to offer around the products. Examples range from logistics, which, especially in the chemicals sector in form of dangerous goods logistics, often needs extensive specialist and market knowledge, up to application consulting for specialty products. As a result, chemical trading companies with decades of specialist and market knowledge are much better positioned to offer customers the corresponding services as a package than pure online platforms that cannot offer any further services tailored to the products. What retail companies partially have lacked so far was an internet presence to offer their services online. However, this can be retrofitted using online shop systems, which are meanwhile readily available on the market. This is also our strategy. Besides our online catalogue, which is available since many years already, we plan to go online with our e-commerce shop, comprising our full supply program, before the end of this year. If it runs smoothly, we may open this shop also to others and expand our platform with it.

Online Business Is an Opportunity, not a Threat

Thorsten Lampe, managing director, Asellion

❶ Online is shaking up the way we live and work and businesses simply must embrace that. It shouldn't be about winners or losers, as online business is an opportunity, not a threat. An opportunity to improve, reinvent and add value. Going online in distribution will foster more openness and clarity. If the opportunity is utilized in the right way, it can lead to long term success. End customers in the long run will gain much better products that will help them solve small and big problems because chemistry will find a better way where it helps most. Development, production, distribution and logistics are capabilities that will persist and gain through better integration.

❷ Asellion is an enterprise B2B e-commerce platform that allows suppliers of chemical products to set up their own online store with custom-built digital trading channels and sell their products to customers directly, privately and in a more efficient way. Covestro Direct Store is the first supplier and store to open on the Asellion platform. In the near term we will focus on enhancing the online communication and deal-making to improve the experience for small and large businesses. When that is done, we move forward focusing on the next big thing: we believe for instance that themed stores for specific industries, enhanced analytics and payment terms are topics of high demand.

Providers with the Best Timing Will Win

Peter Overlack, Co-CEO, Oqema

❶ Most probably. Digitalization is starting to change every single business process, hence platforms acting as "connectors" are urgently required. The experiences from the 2003 e-business cannot be compared to today's overall situation. And finally, even if it sounds a little funny, the ubiquitous mobile phones have greatly reduced resistance towards new digital solutions among our staff, our clients.

❷ Winners will be the ones who are ready to use the digital opportunities the moment we reach the inflection point for our industry. Since no one knows exactly when this will be, all of us cautiously balance between spending too much and too little on digitalization. The ones who embrace the issue wholeheartedly, but too early, risk being set back by a substantial amount of money. The ones who do nothing, will enjoy some more laid-back months or years, but finally might risk being out of business one day. Thus, the ones with the best timing will win.

❸ We try to get our timing as good as possible — preparing our organization internally, but also screening and testing external developments. And it includes not yet giving up completely on our Kemix vision. Two years down the road, there remain strong arguments in its favor.

Only Open Innovation Can Lead to a Better Ecosystem

Matthias Mirbach, member of management board, Stockmeier Holding

❶ The chemical distribution will evolve massively in the years ahead. At Stockmeier, we recognize a broader understanding of online selling and purchasing within customers as well as suppliers. In addition to that, a huge increase in interconnectivity provides far more chances than the contrastable under-complex world of the 2000s.
❷ As we currently see increased digital activity especially on the supply side and self-proclaimed disruptors, our purchasing and business innovation teams are in close contact with major players and promising rising stars. We strongly believe that only an open innovation approach can lead to a better ecosystem in chemical distribution. It will not be about talking but testing new ideas and building proof of concepts. Already in late 2017 we invested in new competence supporting this approach and will continue to adapt to new ways of thinking. In this way, we constantly expand our knowledge, which we then use for the benefit of our customers.
❸ The so-called e-commerce-platforms of the old days will certainly not just be duplicated and shaped for today's needs. As all market participants do have a better understanding of the direction of change, we probably will see both the old and new online business models evolve. Market places, smart auctioning platforms, information providers and proprietary point of sales each offer their own value proposition. As the fastest growing distributor in Europe, we want to keep up with all the developments, but we see information as a key angle to all market participants. In this direction, we want to help shape the ecosystem by supporting Chembid developing the best meta-search engine for chemicals. As a spillover effect, our investment in Chembid four months ago gave the integration of our digital sales strategy a strong boost.

Agility and Velocity Are Key to Succeed

Andreas Früh, CEO, TER Chemicals

Looking at the development of e-commerce platforms over the past two years alone, it is apparent that they will be, and already are increasingly successful. The digital world is developing at an exhilarating speed and so are digital solutions for the chemical industry. Mindsets and expectations are changing quickly, influenced by an increasing number of digital natives entering the market. This opens opportunities for outside players to infiltrate the chemical market and implement successful business models from other segments. However, there are several aspects that prevent a comprehensive success for scattered e-commerce platforms — at least for now.
There is the complexity of compliance and regulations. The vast product range with very specific needs. E.g. technical and formulation expertise for specialty chemicals on the one hand and competitive pricing for volatile commodity products on the other. To offer both in equal quality is challenging, especially as producers need products from both ranges but are reluctant to purchase through various platforms.

There are noticeable attempts within the industry to solve the abovementioned issues from within, segregating outside infiltrators. Ideas range from forming an online distribution alliance, to promoting the incorporation of ERP add-ons that offer direct links between parties and a market platform in one.
So overall digitalization already provides many solutions to enable online chemical distribution and significantly affect our supply chain. This will change business models within the industry but also offer opportunities to increase efficiency and exploit new distribution channels. If played well, producers can be the big winners of this development as they have the power to steer the developments to their advantage. Distributors and logistics provider that know how to ride this wave and offer unique solutions, could however benefit just as much. In any case, agility and velocity are key to succeed.

Added Value for Customers and Producers Alike

Axel Schmidt, chief digital officer Customers, Wacker Chemie

Digitalization is everywhere. We as consumers shop online, we are entertained online, and we communicate online. I am 100 percent convinced that the way the chemical industry works is radically changing in all fields: collaboration, communication and as well commerce. Wacker has been an innovator in this field. We introduced our e-biz solutions in the early 2000s and updated them constantly. Today we sell over half of our chemicals through e-biz transactions.
We now offer "Dial-in-the-Expert" video calls with our technical experts. We have implemented a new customer relationship management system and we are building 360 degree-views of our customers. We also support our sales managers with sales enablement tools such as product selection and cross-selling apps, tablet devices and lead generators.
At the moment, internet based digital platforms still play a minor role. We still sell the majority of our goods with the involvement of highly specialized sales managers and engaged local customer service representatives. And we still have a great network of regional and local distributors.
But times are changing, and we are preparing for the second wave of chemical platforms. They will be more than just search engines. They need to provide added value for customers and producers alike. At the end, the customer will decide which services he needs and what he wants to pay for. But one thing is clear: The new generation of buyers will not accept processes which are not state of the art. They look for anything which makes them faster and more efficient, and that is a good thing. In the future, chemical distribution will be different, but perhaps even stronger.

Business Models Need to Be Questioned

Jürgen Rietschle, managing director, Bodo Möller Chemie

❶ The difference to the platforms from 20 years ago is that the chemical industry itself had established these internet portals without sufficiently questioning the success and specific competences of the chemical distribution business model. An oversupply and the lack of a recognizable added value led to a merger and consolidation phase. Meanwhile, there are other market participants such as Alibaba or Amazon that have expanded the business model of internet platforms coming from the B2C area by new options and a correspondingly clearer positioning to their core competence. The number of digital industrial platforms has started to grow dramatically once again; we can naturally assume that the digital market of classical chemical distribution will extract its market share, but it is important that the mostly small- and medium-sized industrial customer can recognize the added value of a platform in all of this.
❷ An obvious issue is to what extent a platform can contribute to the optimization of the cost structure, and a corresponding answer is found rather in the area of commodities (key or basic chemicals), as it is often difficult here to find a differentiation characteristic. Chemical distribution is certainly also called upon to question its business models and create differences by becoming agile. We have therefore adjusted our activities to market conditions, specializing on segments. Our clear positioning and the development of the most varied additional services such as our "Adhesive Competence Center", for example, allows us to make knowledge-intensive areas like bonding even more extensively accessible to our customers by means of digitalization than our industrial competence.
❸ For us, digital options and networking with our customers remain in the foreground. A completely new online presence that already contains many elements will keep expanding our digital presence as solution provider while emphasizing this orientation. It will become apparent which individual businesses we will also market online even stronger in the future. Of course, the business models of chemical distribution will continue to change digitally, but we should not forget that many complex legal requirements or the illegal procurement of chemicals are often more difficult to control digitally.

The Chemical Industry Will Surely Undergo Digital Transformation

Alexander Lakemeyer, CEO, Pinpools

Since the year 2000, technical infrastructure and requirements for building up a successful digital start-up has totally changed. There is no reason to believe that the chemical industry should be the only global industry that will not undergo digital transformation; the entry barriers are just different. The question is how quickly digitization will progress and at what level the established players will be able to adapt to this change. This will determine how easy it will be for external players to enter the chemical market.

The Chemical World is Becoming Increasingly Ready for the Digital Change

Bharat Bhardwaj, CEO, Noahs Ark Chemicals

It is unquestionable that there is a movement towards online purchasing in the B2B world. The benefits of B2C online consumerism have left their mark on buyers and many now expect some of the benefits, such as real time price comparison, delivery tracking and order monitoring, to be available from their normal B2B suppliers.

At Noahs Ark Chemicals, we aim to stay ahead of the competition and offer our customers the level of service which they have come to expect from large companies such as Amazon when they place any order online, but in the business environment. To permit this, we are planning to offer a bespoke online portal to our customers, allowing them to interact with us online as a complement to our existing way of operating.

We have been distributing chemicals for over 18 years and realize that in order to win business, it is becoming increasingly important to offer a service to your customers above and beyond what they may be able to get elsewhere. On our online platform, customers will be able to request real-time pricing information and stock availability, as well as being able to track orders. This is all in addition to the usual service provided by business managers.

We firmly believe that with more and more millennials becoming decision makers in large companies, the first successful movers in this digital space will have a huge competitive edge. Customers will already have been trained and be familiar with online services, and even expectant of services which are still not typically provided in the B2B chemical world. We hope to set ourselves apart by embracing this digital change, which the chemical world is becoming increasingly ready for.

Chemical e-Commerce Needs to Mature and Evolve

Christopher Erbslöh, managing director, C.H. Erbslöh

❶ If success is defined by the share of transactions involving chemicals and the turnover generated, the new generation of e-commerce platforms and individual e-commerce solutions will surely be more successful in the years to come, than they have been in the past. However, for a real transformation of our industry to happen there is still a lack of differentiation and segment-specific solutions. E-commerce for our industry needs to mature and evolve from being a price comparison tool where spot business takes place, to become a solution provider for innovation, supply chain issues and costly manual work, today performed by the workforce of manufacturers, customers and distributors. C.H. Erbslöh and the LEL Alliance are addressing these issues and will be offering more digital services over the coming years. Nevertheless, we believe that in order to make real achievements our industry as a whole will have to come together to define technical standards and give regulatory guidance to the governing bodies. As long as manufacturers, distributors, platforms, associations and government agencies continue to look for their own individual solutions, the road ahead is going to be a long and bumpy one, as the lack of standards make it difficult to provide differentiation and segment-specific solutions that are easy to use and offer seamless integration into existing processes, systems and tools.

Most Platforms Still Function as “Match Makers“

Thomas A. Dassler, managing director, Häffner

At Häffner, the use of e-commerce platforms is now part of our daily business in our purchasing and sales departments. Especially with regard to the global procurement of chemical raw materials, Häffner purchasers benefit from a faster and more comprehensive market overview thanks to the filter and search functions of the leading e-commerce platforms. E-commerce platforms can also be used to quickly and efficiently win new customers when opening up new sales territories in which the company does not yet have its own sales force or trading partners.

First and foremost, most platforms today still tend to function as „match makers“, i.e. the actual sales or purchasing process continues to take place outside the platforms, once the contact between purchaser and supplier has been established on the online platform via the stored company profile with contact data and product range. The actual sales channel (via agents, traders or distributors) may not have changed significantly in the last 20 years, but the basic way in which a potential customer and supplier find each other has.

Today, millennials primarily use digital marketplaces to find new suppliers. Companies that are not found with their product range on e-commerce platforms will have major competitive disadvantages in the future and must also expect to lose business shares. Likewise, many of the e-commerce platforms that already exist today will disappear from the market because their business model either will not deliver sufficient contribution margins, or the necessary size will not be achieved quickly enough. Against the background of an optimal and successful „digital presence“, Häffner does not only work with the leading e-commerce platforms, but also takes care to optimize our web offer for the search engines on a daily basis so that potential customers can find it more easily.

Voices of the Future

Current Market Trends and Challenges Ahead for Chemical Distributors

In today's competitive global market, chemical distributors face not only growing compliance demands and have to deal with digitalization issues but also strive to increase their significance in the chemical value chain and adapt their business models to a changing market environment. Under the theme "Voices of the Future" the annual congress 2019 European Association of Chemical Distributors (FECC), to be held in June in the seaside town of Sitges, Spain, aims to provide inspiration to the delegates on all these topics. Michael Reubold asked Neville Prior, president FECC, and Frank Schneider, vice president FECC, about the challenges ahead for the chemical distribution industry and ways to cope with them.

Neville Prior, president, European Association of Chemical Distributors (FECC)

Frank Schneider, vice president, European Association of Chemical Distributors (FECC)

CHEManager: What are the current market trends in chemical distribution and what is driving them?

Neville Prior: The distribution market is still enjoying growth rates over and above that of the chemical industry generally. The impetus for this continues to be the growing understanding by manufacturers of the added value that distributors can bring, and the wish to simplify their business models. As has always been the case, manufacturers tend to deal on a direct basis with the large multinational customers, but the point at which customers are handed over to distributors is increasing in size. For now we see this as an ongoing trend, and Europe for instance has some catching up to do in this regard, with Asia and the Americas. Of course, this trend is not uniform across the distribution spectrum and we see that the distributors that benefit either have the assets to add significant value, such as laboratories, blending capability, repacking facilities etc., or have regional or global coverage.

What is your vision of the future for chemical distributors? Will their significance in the chemical value chain decrease or increase?

N. Prior: I believe that the industry has a bright future, and that it will continue to see growth. Distributors, in hand with organizations like FECC, are continuing to talk about the advantages they can bring to the chemical industry generally, and manufacturers are listening. Good businesses look to simplify their business models, and distributors can allow complex manufacturing to do just this. Alongside that benefit, distributors have excellent market insight and broad market coverage, which results in better service to customers and principals alike. As always, there is the possibility of markets being disrupted, and the industry needs to understand and embrace the opportunities that emerging technologies bring. This is possibly the number one topic on the tongues of the distributors right now.

How do chemical distributors have to position themselves in order to play an even stronger role in the chemical value chain?

Frank Schneider: Chemical distributors have proven that they are flexible in the way they conduct their business. There is not "one size fits all" but the necessity for an individual approach by each individual player. Every company has to define and to continuously review its core competences and determine its own strategy. Chemical distribution always lived from its creativity and its preparedness to adapt to changing business environments and the growth rates of the past decades have established a proven track record. Flexibility, creativity, speed and service will remain the determining success factors…hence the right people and the adequate networks are key.

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Past and Future: The 17th century church of Saint Bartholomew and Saint Tecla in the Spanish seaside town of Sitges provides the scenery for the FECC Annual Congress 2019, where attendees will discuss the challenges ahead for the chemical distribution industry.

How does the chemical distribution industry prepare for this new or at least changing role?

N. Prior: Simply having a competitive product is no longer good enough. Customers and principals are ever more demanding. Distributors must look at their organizations and create suitable strategies, have the right people and invest in their businesses. They must embrace the latest technologies where they are appropriate and ensure that their operations are adding value both internally and externally. They need to ensure that the "customer experience" is the right one and understand that the generations coming through have different requirements on how they are communicated with, how they buy and how they find information. Every closer partnerships on technical and supply chain support will be needed. How for instance can Artificial Intelligence be used? On top of this, companies need to consider how they can be better corporate citizens. The wider public are looking for ethical and responsible products, and our customers will be looking to us for the same.

Digitalization has proven to be a disruptive force in many industries, providing entry points for new market participants. Are chemical distributors looking to protect their businesses from such outside influences or rather utilizing them to develop a future-proof business model?

F. Schneider: Protection never helped in free market and business environments. Cooperation and participation will lead to better understanding of all options the digital world and community are offering to chemical distribution. This is why FECC welcomes and opens towards the new digital players that are entering the arena of chemical distribution and recommends its members to share this path. We should not see these as "outside influences" but make them part of daily assessments.

Previous FECC annual congresses already focused on 'Chemical Distribution 4.0'. After a couple of years of discussion, how well prepared is the chemical distribution industry for the challenges that come along with digitalization in various aspects?

N. Prior: I would like to believe that the message has started to gain traction. For many years technologies such as EDI [electronic data interchange (editor's note)] have been in use, as have websites. Now, distributors are looking at and creating platforms in order to market over the internet, but this is just the beginning. Consideration must be given as to how AI and bots, virtual or augmented reality, internet of things, blockchain, amongst others, can find appropriate and value creating roles within companies. Like it or not, technology is here and growing at an exponential rate, we need to consider it further.

At the FECC Congress 2019, participants will share their visions for chemical distributors. Which are the topics to be discussed?

F. Schneider: We chose the theme "Voices of the Future" as we actually see a strong and significant turn in our society, which has a similarly strong direct impact on our business environment. The generation of baby boomers will be reaching retirement age in the coming years, with a new generation arriving commanding a fundamentally different personal value scorecard. Communication speed has increased as have information volumes.

Travel and general mobility have reached a level that the world seems to shrink, and working globally has become a daily challenge. Cultures are mixing and melting together around the globe throughout all businesses, creating new technology dimensions and new product requirements, newly designed raw materials are spreading, and people are changing personal priorities when it comes to balancing out work and private life areas.

At the FECC Annual Congress 2019 we want to offer a forum to openly and ambitiously discuss which impact all of the above — and more — changes and challenges can and will have on the chemical industry in general and on chemical distribution in particular. Attendees will discuss what we can and should do to cope successfully with this rapidly changing business environment in the near and midterm future, and how we can prepare for the longterm. And for sure items such as diversity, gender ratios, women in leadership, addressing and winning young talents, digitalization, globalization, sustainability, and many others will guide us through the discussion.

As change is everywhere, how does the FECC as an association providing advocacy, educating and supporting for their members adapt to the changing market environment?

F. Schneider: Listen, understand, learn, develop, support! This is what FECC is trying to do and this is reflected very much visually in the newly designed congress format. We want to establish more dialogues and multilateral interaction among all our members and together with all stakeholders of our relevant industries. We want FECC to become "the marketplace" of new ideas, new developments and new trends for chemical distributors. We do not want to be "teachers" but encourage and enhance a space and forum that allows to make our segment strong, resilient and future-oriented.

Distributors face the same challenges and deal with the same issues as their suppliers who can rely on influential industry associations and lobby organizations. Should FECC intensify collaboration with, for instance, CEFIC on a European level?

N. Prior: FECC has and continues to have a strong voice in Brussels. It is one of the cornerstones of FECC's existence. FECC has also had a relationship with CEFIC for many years, collaborating for instance on Responsible Care. In recent years we have sought to deepen that relationship and continue to do so. However, FECC has also built relationships with many other organizations in Brussels, both upstream and downstream. This allows our collective voice to be heard more strongly and brings a wider ranging perspective to our thoughts.

We will continue to adopt that approach and build informal or formal partnerships where they bring benefit. Of course, we work closely with our national association partners across Europe. FECC has also looked beyond Europe in these relationships, as we find ourselves in an ever more global industry, and we are proud of our collaboration with organizations such as NACD in the USA and ICTA on a global level. The stronger our voice, the more we can help our industry to grow, prosper and engage in best practice.

www.fecc.org

Challenges and Opportunities

UTS Group Provides Services Along the Chemical Value Chain in the CIS Countries

The Commonwealth of Independent States (CIS) consists of ten Eurasian countries formed following the break-up of the Soviet Union. Three years after its inception in 1991, United Trading System (UTS) was established as a distributor of chemical products in the region. Since 1994, UTS has organically grown to become both the largest and the most influential chemical distribution company in Russia and the other CIS countries. By 2018 UTS Group, headquartered in St. Petersburg, Russia, included 16 companies employing 420 people and generating an annual turnover of around $200 million. Michael Reubold asked Sergey Andreev, deputy managing director UTS, and Lars Hjorth, managing director UTS Scandinavia, about the current market situation in the Commonwealth of Independent States (CIS) region and beyond and the strategy for the company ahead.

CHEManager: UTS has been providing chemical distribution services in Russia and the CIS countries for 25 years. What were the milestones developing your company in this quarter century that has also seen political and economic turbulences affecting the area?

Lars Hjorth: If you look at the 25 years of history of UTS you will see that every one to two years there was an important event expanding our regional presence, infrastructure or competences. We developed a clear strategy to expand our business.

A very important step was, in the year 2000, going beyond St. Petersburg. Today our company has offices in Moscow, Kazan, Rostov-on-Don, Ekaterinburg and Novosibirsk while headquarters remain in St. Petersburg.

The next move was the exploration of the neighboring countries. We started our internalization in Ukraine in 2003 by establishing our own company and continued in Kazakhstan and Belarus with local offices and warehouses.

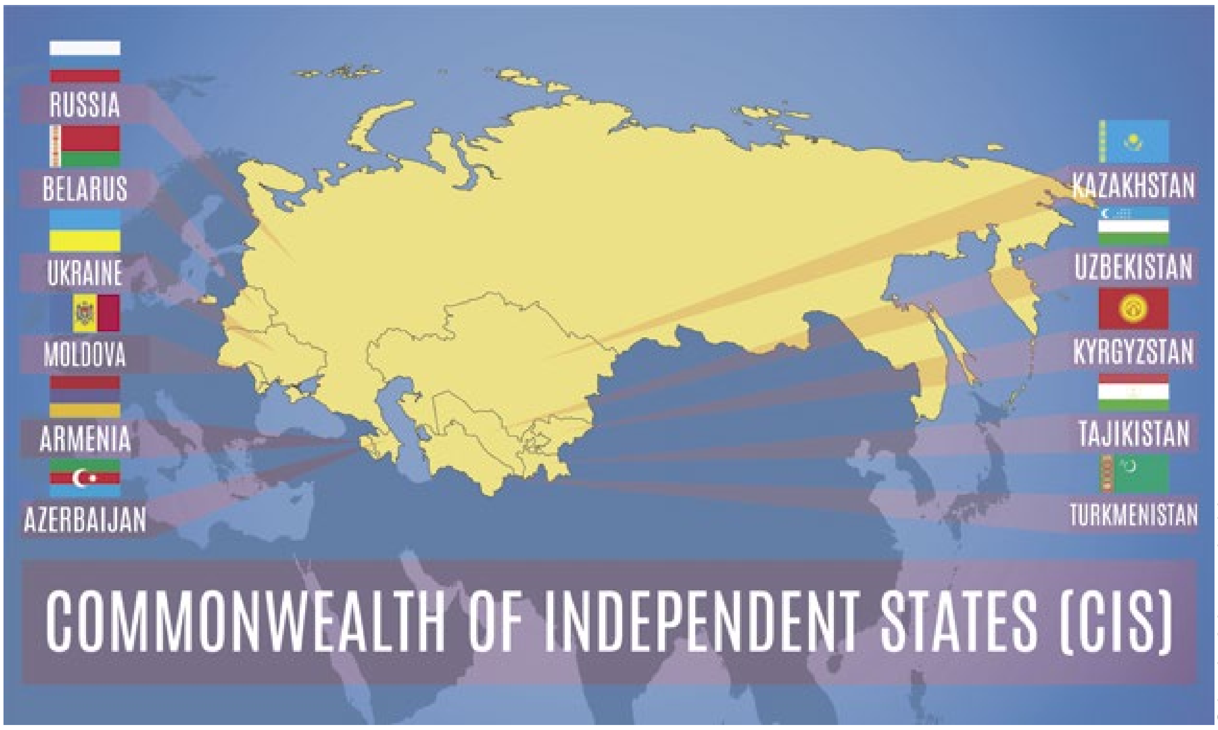
A wise idea was to go to China almost 10 years ago. UTS Shanghai is a full-fledged legal entity that supports both our sourcing and exporting activities. Today, more than 25% of products that we distribute have Chinese origin. With many Chinese suppliers we enjoy a long history of relationship and exclusive terms of cooperation.

And, this year we opened our own office in the city of Vadodara, in the heart of the Indian chemical industry.

But this path was thorny. For instance, UTS group was strongly hit by the global economic crisis 2007–2009 and abrupt devaluation of local currency. Contrary to many companies and banks having their roots in the 1990s we have survived and became even stronger thanks to the commitment and believe of the team, the help of our suppliers such as BASF, and the loyalty of our customers. The commitment of the team was so strong that people were eager to return part of their salaries thinking that the company payed more than it could in these difficult times. We did also use our own regenerated financial funds.

Sergey Andreev, deputy managing director UTS

Lars Hjorth, managing director UTS Scandinavia



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Then there was 2014 with Maidan in Kiev and the Crimea. At this time, we could not even imagine what would happen in the coming years. The exchange rate turbulences of the Russian Rouble, Ukrainian Hryvnia, and Kazakhstan Tenge to the US dollar did affect the business strongly. Can you imagine how to do chemical distribution under such circumstances? Nevertheless, we have left this crisis behind us, too, and managed to adapt to the new circumstances inclusive politics. Nowadays, we manage our business in Ukraine via Sweden, and Ukraine became our growth leader in 2018.

Having an international exposure, we also feel the pulse of international turbulences such as the change of environmental policies in China or the trade dispute between Beijing and Washington. Even Brexit may have an impact on the costs of material from the UK. We try to follow those trends and take precaution measures to minimize the risks.

Somehow, there is a painful contradiction between obvious globalization of international trade and the era of internet with sanctions and limitations that have recently become a common practice. We think that UTS has developed a strong 'immune system' that helps us to endure future challenges, but we always remember that there might be a 'worst case' scenario.

How would you describe the chemical distribution landscape in Russia and the CIS countries in terms of the number of distribution companies and services offered?

Sergey Andreev: The Russian state has taken tremendous efforts in the last years to prevent violation of the customs and tax legislation in Russia. Those violations were a big challenge for us in the past. But now the situation has changed, there is one 'set of rules' for all. With exceptions, competition has become much more civilized. A visible easiness of doing chemical distribution opens doors for new competitors in the market. European distributors like Brenntag, IMCD, and Telko became more visible.

We see three major groups of chemical distributors in the Russian market — general distributors, both local and international, having a broad portfolio of products; specialized distributors focused on a certain product line or an industry; and those who we call 'logistic companies' — mostly commodity traders without any clear strategy in the market.

We adhere to "general distribution" and firmly believe that diversification of the portfolio is a cornerstone of a sustainable business. We are convinced that a distributor like UTS needs both commodity and specialty products in the portfolio — it is only the question of ability to drive different business models within one organization.

What differentiates UTS from your industry peers?

S. Andreev: We differentiate from our competitors through what we call 'value added distribution' — a combination of product portfolio, technical service, marketing and financial strength. We continuously work on the improvement of our offering and recently launched new services for our customers like product blends and door-to-door logistics for dangerous goods in the Moscow region.

One of our strategic targets is to have state-of-the-art logistics both in terms of service and cost efficiency. Already now we know how to manage cargo from any part of the world to Russia, Ukraine and CIS countries, and our logistics comprises the ports of St. Petersburg for the European or Vladivostok for the Asian route as well as railway from Europe or Asia. We know how to do the customs clearance in full compliance with the law but cost efficient.

Are there differences in the business of chemical distribution in Russia and the CIS countries compared to Western markets? How, in your opinion, do the roles of chemical distributors differ?

L. Hjorth: I don't think that there is a tremendous difference in terms of business model. You buy a product as efficiently as you can, and you sell it as profitably as you can. However, there are nuances. Western markets are strongly regulated and protected by legislative initiatives like REACh. Our markets are exposed to the materials from all over the world with limited regulation. On the other hand, the Russian market is protected by customs barriers and as a chemical distributor you must know how to deal with it. Chemical markets in Europe are driven by sustainability and 'green' chemistry. Our markets are often cost-driven in the face of weakening purchasing power of the population and an expanding low-cost segment. In other words, it's not enough to offer a product — we need to offer a range of products for different cost segments.

Another expectation of our customers is information about new products, trends and formulations. This is the reason why we take every opportunity to offer trainings for our customers hand-in-hand with our suppliers. Chemical distributors in our market are an important source of information and education. Relationships and mutual trust continue to play a very important role in our markets contrary to Europe that relies more on the processes and institutions.

Continued Page 22 ▶

To our knowledge, chemical distributors in the West do more in terms of formulations, repackaging, logistical services, etc. We are confident that Russia and the other CIS countries will follow the trend.

In Western countries, distribution and logistics services have separated to a large extent, establishing two different markets with specialized companies. Do you expect the same development in Russia and the CIS countries in the near future?

S. Andreev: We follow the experience of European companies that take over logistical and transportation services for a supplier. This is a logical development of the specialization and focus of companies on their core competences. However, our markets are different. Look at the territory of our activities and you will immediately see why. We source products from the EU, China, India, Brazil and many other countries. There are nine time zones between Moscow and Vladivostok. Transportation & Logistics is our 'license to operate'. To make a judgement call about the future we probably need to explore the European model in more detail, but we think that the market and level of competences is still not mature enough for this kind of split.

What are the current market trends in chemical industry in Russia and the CIS countries and how do you take advantage of them?

S. Andreev: First of all, Russia has become self-sufficient in commodity polymers — PP, PE, PC, PVC, etc. Several projects are under implementation or planned, like Zapsib by Sibur, a new ethylene complex by Nizhnekamsk, projects of Rosneft and Gazprom in the Russian Far East, and some others. Their successful implementation will lead to further capacity expansion. This means that there will be an abundance of monomers — inclusive acrylics — and commodity polymers.

Secondly, in the last five to seven years Russian mid-size companies have successfully launched production of specialty chemicals like amines, polycarboxylates, acrylic dispersions, redispersible polymer powders, chemicals for road construction, crop protection, etc. All these products had been 100% imported in the past. Economic sanctions against Russia have a negative impact on the economy but they also have their flip side — the development of the local industry and import substitution. I think many European suppliers still have not realized this fact and wonder why their Russian business is declining. For us it's as simple choice — either we are out of the market with imported goods or we cooperate with local manufacturers. We always respect and strictly follow all agreements with our external suppliers but also try to explain that without localization or rational compromises both of us will drop out of the market sooner or later.

We permanently explore new opportunities and new market segments. Only in the last two years we have successfully launched solvents, water treatment chemicals, personal care ingredients, raw materials for sealants and adhesives. There are many more opportunities that we could chase but we are very selective in terms of our portfolio and always check if it fits our 'DNA'. We have not run out of ideas and our three-year opportunity pipeline that we revise on an annual basis has a value of $180 million.

UTS Group owns some 31,000 m² warehouse space in St. Petersburg, Moscow, and Kiev.

What are the biggest challenges for chemical distributors in Russia and the CIS countries?

S. Andreev: The biggest challenge are low growth rates. Russian GDP only grew around 2% in 2018. The other countries are not much different. Main reasons are demography, lack of investments, especially FDI, and some other factors. Despite a comparably low inflation — 4.2% in 2018 — and comfortable oil prices the real income of the population has not been growing for several years. In turn, margins of our customers are under increasing pressure. We also permanently monitor indirect economic indicators like the 'average supermarket bill': it has newly declined in 2018, especially in the regions outside of Moscow. We have to adapt to those realities.

Another challenge is local currency fluctuation. Gradual sliding is not a problem but sharp declines lead to financial shocks. Cashflow of the company is a measure permanently watched. Contrary to multinationals we do not have access to unlimited resources and always have to find the right balance between financial stability and growth. Nevertheless, we are absorbing all those risks for our suppliers.

On a personal note I would add that it's a pity that there is no strong local association in Russia — neither of the chemical industry nor of the local distributors. It could help to advocate the interests of the industry much better.

Issues driving the global chemical business are innovation, resource efficiency, digitalization, and — as you already mentioned — sustainability. How are these 'megatrends' regarded in Russia and the CIS countries?

S. Andreev: Actually, we are squeezed between the interests of our suppliers and our customers. It's not only the West but also China is following the megatrends. The chemical industry in China faced enormous changes in the last years leading to industry consolidation and survival of sustainable suppliers. This led to shortages and price hikes of materials and raw materials. Russia has an abundance of raw materials, significant territory and economic challenges that have an impact on the roll-out pace of those "megatrends" in the country. Nevertheless, also here things change driven by the awareness of the public and advanced management and governmental efforts.

Russia is turning its' face toward alternative energy, preservation of water resources, and sustainable agriculture. Several advanced companies like Sibur have introduced Responsible Care principles in their business. This trend will inevitably strengthen in the future. Finally, we all live on the same globe! However, at present, we indeed see a discrepancy between the modern portfolio of our European suppliers that is getting more 'green' and sustainability-oriented and the requirements of our local customers. I do not know why, but 'green' is almost always expensive. In such cases we have to do double work — to have a product to satisfy the ongoing business, and to push new chemistry into the market as this is the future anyhow.

> *"A visible easiness of doing chemical distribution [in Russia] opens doors for new competitors in the market."*

We also would like to use this opportunity to ask European manufacturers not to 'write-off' Russia from their strategies in terms of a 'green' and sustainable portfolio. We strongly believe that also in our markets the megatrends will find their home. As UTS, we are fully open for such a cooperation. A couple of years ago I participated in an event where a representative of a US mid-size company explained their strategy of "costovation" — a combination of cost advantage and innovation. I think that's exactly what we need in our markets.

In Western countries, digitalization is heavily discussed as a disruptive force that could urge chemical distributors to rethink and change their business models. How do you see the influence of digitalization on your business in Russia and the CIS countries?

S. Andreev: Digitalization in general is rapidly penetrating all spheres of our lives. Nevertheless, the disruptive impact of digitalization that we saw in entertainment and communication or retail is not so easily transferable to the chemical turf — due to specifics of manufacturing, transportation and handling of chemicals. There is no doubt that this is the future, but we at UTS rather take a pragmatic approach: there is a demand, there is a solution.

We are making two important steps in the direction of digitalization in 2019. In January, we launched a new ERP system for the group, and in May we are going to roll-out a newly developed website. The ERP system will give us a totally different quality of management reports, detailed P&L and more precise consolidated reports for the group. The new system is expandable towards automatic order transmission to UTS in Sweden, digital document turnover, CRM and HR data base. The new website will have a modern design and will be adoptable to smartphones and tablets. It will offer much better product search opportunities for our customers and will later comprise an expert system for customers' self-service.

We have established contacts with one of the digital chemical platforms in Europe and make our first experience there. One of the challenges where we have not found a solution so far is the digitalization of logistics, first of all, the traceability of orders. The number of IT specialists and programmers in the company is rapidly growing. However, we take step-by-step approach also considering our limited resources.

What are your key success factors?

L. Hjorth: We think that our key success factor is people, even despite digitalization. We took measures to strengthen our human resources in 2018, first of all towards attracting talents to the company, and trainings — both technical and commercial. Our employees have got access to recommended webinars and online training tools.

And what is your strategy to develop UTS in terms of product portfolio, services offered, regional presence, or supplier and customer network?

S. Andreev: Looking into the future we will continue to expand our portfolio through new products as well as our own formulation and blending capabilities. Our strategic task for 2019-2020 is to further strengthen our position in the most prosperous region — Moscow. We keep investing in human resources, new ERP systems, both hardware and software.

L. Hjorth: Strategically, we have an international ambition and will continue to strengthen our international network. And we do have all preconditions for that. We will continue expanding our product portfolio through new partnerships with mid-size European companies, new Chinese and Indian producers as well as local champions. We plan to produce more products under our own trade name, both locally and outside of Russia and will chase up re-packaging and formulation opportunities.

In terms of regional presence we will focus on kicking-off our India business and plan to source goods for $10 to $15 million annually from this country short-term. In 2019, we are planning to diversify our customer work towards closer cooperation with leading local and international accounts. In other words, we do not lack ideas what to do and will always keep an ambition to be no. 1 in our markets.

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Digitalize and Cooperate

Logistics Trends and the Chemical Industry

There are ten megatrends which are different in type and kind that influence the logistics industry. Among those mega trends are globalization, demographic change, new lifestyles of customers, the trend towards service integration (servitization), sustainability, rising risks along global supply chains, digitalization or technology deployment, new challengers, professionalization of logistics processes and the development of logistics as a core competence.

Of course, the world is complex and ten trends might be too few to explain what is going on in logistics as a whole or in chemical logistics. But even ten trends are too many to be born in mind on a daily basis. Therefore we will try to break down these trends to the most important right now.

To do so, we start to discover the challenges of the chemical logistics industry by asking a couple of experts in the overlapping area of logistics and the chemical industry to name actual challenges from their point of view. The following list reflects just some perceptions of industry insiders from logistics service providers with a chemical industry focus and from the industry perspective likewise. The statements answer to the question on challenges of chemical logistics right now:

- We need to go into the direction of an integrated steering of global supply chains in times when supply chains are becoming even more complex each day. (chemical industry perspective)
  → statement points towards digitalization and the need for cooperation
- We need to deploy smart business solutions and digitalization to gain business. (chemical industry perspective)
  → statement points towards digitalization
- We need to focus on customers and process orientation according to business needs (resilience and responsiveness). (chemical industry perspective)
  → statement points towards the necessity for customer orientation
- Digitalization in production industry 4.0 must go hand-in-hand with logistics 4.0. Regarding data, shippers must think outside the box — that is 'think beyond the factory gate' to realize the true potential. (logistics service provider perspective)
  → statement points towards digitalization and the need for cooperation
- The sooner we receive relevant information, the faster we can react. In our experience customers for logistics services are most successful when they analyze processes together with their logistics partners and, in consequence, are able to take the right strategic decisions. (logistics service provider perspective)
  → statement points towards the need for cooperation
- We try to receive information about planned shipments as early as possible; this allows us to align our expertise with the customers' information in the best way possible. Let´s for example take logistics' beloved, short month of May with all its bank holidays — or sales campaigns and quarterly statements. (logistics service provider perspective)
  → statement points towards the need for transparency
- What really became apparent in our sector in addition to a lack of drivers — there is a shortage of load capacity. At peak times, it is becoming more and more difficult to get enough load capacity on the market. These capacity bottlenecks push up costs that we have to pass on to our customers. Additionally, in Germany we are moving towards an alarming lack of drivers. (logistics service provider perspective)
  → statement points towards a lack of drivers and towards rising transportation costs

Martin Schwemmer, Fraunhofer SCS

We conclude with some thoughts on the most relevant strategic trends the chemical logistics sector is facing at the moment.

Digitalization in Logistics

Digitalization and technology application in logistics is surely a mega trend that is not only palpable in the chemical industry. This will remain the case in the coming years. Where some years ago cloudy concepts of digitalization were dominant in discussions on that topic, nowadays technical solutions, concepts and methods get differentiated according to their possibilities.

However, there are still problems and a rapid deployment of technological solutions along chemical supply chains is not in sight. But once skepticism about sharing information across company boundaries and usefulness of technology have been overcome, the enhancements and steps into that direction will be made. Broadband expansion naturally plays a further role, as fast connections form the backbone of digitization and communication.

The expert statements above contain no particular technologies regarding digitalization. This is noteworthy, because it seems not to be a matter of technology or the right interface to apply digital technology. There are a lot of technological solutions in place and these can be applied, once the use case is found. Transparency and visibility of the supply chain appear to be achievable.

Obstructive reasons for lacking deployment of digital technologies or concepts are mostly caused in organizations due to cost oriented reasons. Vice versa, a lack of skilled workers might have a catalyzing effect to introduce digital means of production as productivity of logistics needs to rise to compensate for lacking work force.

Customer Orientation

A second concept mentioned in the experts' statements is customer orientation. The streams of goods are becoming more filigree and even if the tons moved do not increase as in previous years, the streams of goods and their management become more complex and costly. To that extent it becomes more important not only to produce or deploy goods in the same manner as in the past, but to enhance products and services with the customer in focus.

Saturated markets in Central Europe need to be addressed customer-oriented with even more than just the right quantity/quality etc. but ever changing quantity and quality. In relation to the different markets in which a modern industrial company operates, this means addressing each market and customer with products that the customer wants.

This has harsh influence on logistics processes as well. When it comes to customer orientation and innovativeness in general, the logistics industry is taking lectures from a high number of new logistics ventures that are entering the logistics markets right now. Customer orientation is a concept which is highly appreciated by new ventures. So, established players of the logistics and chemical industry can learn from those new market entrants. In short, this means that the focus should be on customer orientation.

Lack of Loading Capacity in Transportation

A third relevant challenge right now and for a minimum of three or more years will be assuring loading capacity for transports. A shortage of load capacity has arrived in surface transport as truck drivers are lacking noticeably. As this is a topic about which we talked sometimes in the last few years, nobody can really state that it came surprisingly. However, the effects are unwanted of course and transportation buyers are surprised that prices climb at a general amount of around 5–6% right now, and the years with no big volatility in price developments are over. The reason is a harsh lack of drivers which won't be overcome in the short term.

> "The sooner we receive relevant information, the faster we can react."

Another reason is the need for logistics service providers to invest in digitalization to lift productivity. From a market observer's point of view the lack of skilled workers — especially drivers — might become the most important image campaign for the transportation business. Right now, nearly everybody in need for a goods ride now and then must take note of rising price levels. Anyone who really wants to know why this is happening must also take note of the bad conditions for the driver's job.

This is not only a challenge in Europe but also in the Northern American transportation business. As surface transportation is even more important there due to much longer distances on the North American continent, the effects might be even worse there. But the reasons are very similar to those in Europe: bad conditions, bad payment and bad image. And asset light business models won't help to mitigate that trend.

As nobody wants to have fixed costs for trucks, trailers and drivers, there seems no short-term solution graspable. The fight against lacking loading capacity is not really on anybody's agenda. Having a look at autonomous driving which is talked about much nowadays, the driver shortage is here untimely. Drivers are needed more than ever, but you can't promise a driver that he won't be rationalized away in the coming years and the question is how to motivate people to become drivers.

That is a challenge not only for the chemical industry and not only for logistics but for the economy as a whole. Unfortunately, there is no short term solution in sight. Wages will go up and prices for transportation as well.

In addition, there are infrastructure problems with the loading capacity of inland waterway vessels due to low water or lack of flexibility in rail freight transport and road-side infrastructure problems, which are currently noticeable at operational level.

This brings us back to the statements made by practitioners in the chemical industry, which can be summarized and point in the direction of digitization, cooperation and customer orientation. These concepts are part of the solution to future challenges for industry experts.

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www.scs.fraunhofer.de

ABS and CINS Team up to Improve Container Vessel Safety

ABS and leaders representing the Cargo Incident Notification System (CINS) are working together to develop actionable recommendations to help mitigate risks posed from the stowage of dangerous goods on containerships. CINS is a shipping line initiative, whose aim is to increase safety in the supply chain, reduce the number of cargo incidents onboard ships and highlight the risks caused by certain cargoes and/or packing failures.

ABS has been working with CINS members over the past six months to develop best stowage strategy guidelines. Following a three-month trial, the best practice guidelines are intended to be published on the CINS website (www.cinsnet.com). The collaboration assembles key industry stakeholders to examine the challenges and risks that containership owners and operators face, when stowing dangerous goods.

"Carriage of dangerous goods, not properly identified or accounted for, can be detrimental to the safety of the ship – and, more importantly, to the people on board that ship," said ABS vice president for Technology, Gareth Burton. "Central to our joint effort is advancing safety by developing a set of best practices incorporating key


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lessons learned provided by CINS members from past incidents."

The objective of this project is a comprehensive set of best practices to improve stowage planning and hazard mitigation for dangerous goods carriage, leading to a focused application of existing risk assessment processes.

"By working together with ABS and other leading international partners, we can share our experiences and help to improve the safety of stowing dangerous goods," said Uffe Ernst-Frederiksen, chairman of CINS. "We are looking forward to channeling these experiences into the development of this new industry best practices document and welcome views, insights, and other risk-based approaches from various carriers that can help improve fire safety in our industry." (rk)

Logistics Performance Is a Driver of Corporate Performance!

Miebach Consulting Study Reveals new Trends in Chemical Logistics

For many years, the chemical industry was asleep regarding logistics. Although logistics costs played a significant role for many chemical companies, in many cases they were seen as an optimization field only to a limited extent. The focus was too much on production and capital-intensive plants; logistics, on the other hand, had to function at the end of the value chain. The ability to influence logistics costs and the importance of logistics for service and flexibility were often rated as low.

This picture has changed fundamentally over the past five to ten years. Increasing competitive pressure, increased price sensitivity on the part of customers, shifts from procurement and sales markets, and increasing safety and security regulations are posing new challenges to the logistics of chemical companies.

This initial situation led Miebach Consulting to carry out a market study on logistics in chemical companies for the first time in 2016. The study at that time was the first survey of logistics in the German chemical industry. Three years later, now it is time to review the results achieved in 2016 and to track down developments that have been driving the industry ever since.

One of the results of the study in 2016 most mentioned in the media was the finding that a poorer or better logistics performance might also result in a poorer or better company performance. At the time, this new and provocative finding provided a variety of topics for discussion and raised the question anew of the significance of logistics in many companies. Therefore we have investigated in the current study the question whether the results from 2016 can be confirmed or whether there is currently a different assessment of the participants.

If one compares those companies that assess themselves worse than the average of the industry with those that assess themselves better than the average, it can be seen that 71% (2016: approx. 57%) of the companies with below-average logistics performance also show below-average company performance, while from the group of companies with above-average logistics performance approx. 56% (2016: 84%) also show above-average company performance.

Of the above-average successful companies, over 70% have an above-average logistics performance (2016: 64%), whereas of the below-average successful companies, approx. 56% (2016: 80%) also have a below-average logistics performance. In

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Klaus-Peter Jung, Miebach Consulting

the 2019 study, only 13% of all participants (2016: 23%) managed to achieve above-average company results with poor logistics.

A Fundamental Change in Thinking

Is this an indication that a poorer or better logistics performance also results in a poorer or better company performance? At least the survey results suggest such a connection — even if the evaluations may not be statistically significant. If this is true, then in conclusion, logistics management must do everything in its power to improve logistics performance in order to make a relevant contribution to corporate performance. Compared to the past this is actually a fundamental change in thinking. The paradigm shift means there is movement away from the pure functioning of logistics towards logistics as a value driver!

In addition to the relationship between logistics performance and company performance, the study also addressed other topics such as the degree of outsourcing, supply chain typologies and strategic, infrastructural and operational logistics projects and their drivers in chemical logistics. Special attention was paid to the currently highly discussed topic 4PL.

The term 4th Party Logistics Service Provider, or 4PL for short, is frequently used in the industry. Already a hot topic in the 90's, the triumphal march of the 4PL was hypothesized by some sides, however its presence was not reflected in reality in any way. If one compares the publications, lectures and other PR activities of that time with the true number of implemented projects, it seems as if the 4PL euphoria of that time was more of a marketing hype than an actual trend.

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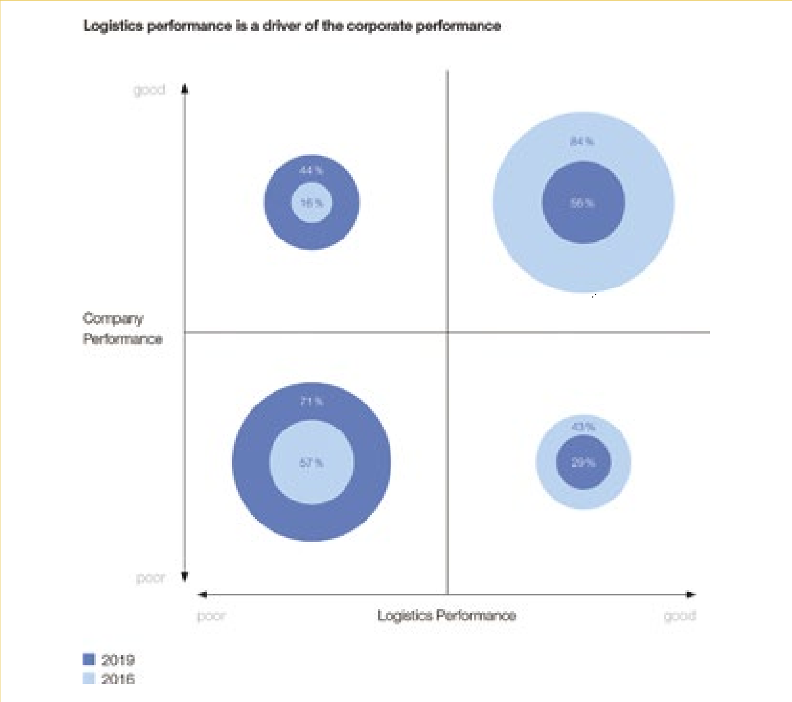

Fig. 1: Logistics performance is a driver of the corporate performance

For a long time, the concept had been quiet, but in recent years it has experienced a public renaissance — 4PL is back in public discussion. And especially in the chemical industry, there have been attempts by various companies to approach this model and try it out.

The renaissance of the concept is based on various reasons: On the one hand, the revival of the idea can be observed in some industries that ex-

> *"There is movement away from the pure functioning of logistics towards logistics as a value driver!"*

hibit a very high degree of standardization for the supply chain planning and execution processes. These industries are characterized by the fact that the primary focus is on reducing transaction costs rather than focusing on logistics know-how or customer-specific solutions. It is precisely in this respect that the chemical industry has specific features, which means that the 4PL concept is more likely to be used here than in other industries, since in many cases entire truck loads, entire containers or rail tank wagons have to be dispatched and fewer small shipments are involved. These requirements can be implemented more easily today than in the 90s or 2000s due to technological progress using IT, Big Data, etc.

On the other hand, the established logistics service providers have further developed their concepts in such a way that they represent an interesting offer for the customer even without the historical focus on their own service provision, e.g. by making a significant contribution to increasing supply chain visibility and improving the availability of information for decision-making.

4PL Concept Critically Assessed

As a result of these developments, the chemical industry in particular has been more intensively addressing the issue of 4PL in recent years, while other industries have already turned their backs on this concept. Reason enough for Miebach Consulting to question whether the chemical industry is sticking to the concept or whether the end of the 4PL concept has already been initiated, as some decisions of large chemical companies suggest.

The study results are particularly interesting in this respect: the participants do not expect any significant cost or quality advantages from a 4PL concept. Rather, they assess the concept very critically because the processes in the company can only be standardized to a limited extent and are therefore not suitable for outsourcing to a 4PL. Interesting is also the fact that although only a third of the participants (35%) expect a dependency on the 4PL, which they would like to avoid, about two thirds (65% and 62%, respectively) argue that the 4PL approach leads to

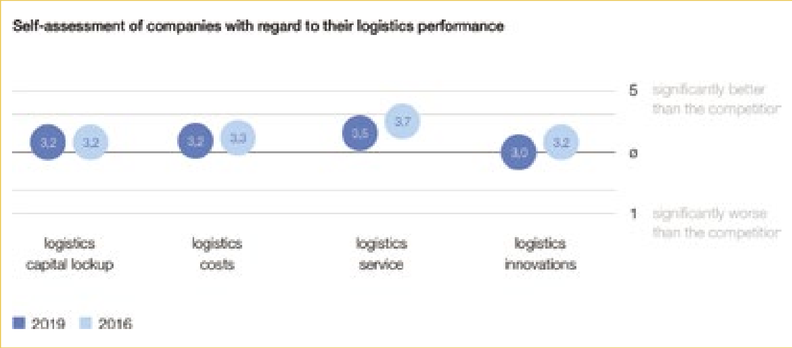

Fig. 2: Self-assessment of companies with regard to their logistics performance

the loss of internal know-how, which should be avoided, and alternatives such as supply chain visibility or control tower approaches offer similar advantages to a 4PL without creating dependency problems.

Due to the very critical evaluation of the 4PL concept also in the chemical industry, it must be stated that perhaps it is not the end of the 4PL concept in the chemical industry, but this very special concept obviously only seems suitable for a few companies and will therefore have a niche existence rather than an industry trend.

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The complete study can be requested from Ralf Hoffmann by e-mail at hoffmann@miebach.com.

Sustainability Versus Profitability

A Digital Twin for a Sustainable Supply Chain in the Chemical and Pharma Sector

Companies across industries are torn between sustainability and profitability. But is this really a contradiction? Suppliers hold a key role when it comes to making supply chains more sustainable. The chemical and pharma sectors have broad experience with certification processes and can use this knowledge to help suppliers become more sustainable along the supply chain. A digital twin helps to make the right decisions for an optimized supplier network.

When it comes to sustainability and environmental protection, the chemical and pharma industry are under extreme scrutiny. Wastewater, other waste and scrap as well as the handling of gas and oil pose potential environmental hazards. So do many chemicals and explosives that are being processed on a daily basis. Accidents can lead to fatal outcomes and the public is usually concerned when there is a chemical plant near a residential area. More than in other industries, it is imperative for the pharma and life sciences industries to have sustainability high up on the agenda.

However, environmental protection practiced in a plant is not the only factor impacting sustainability. Companies processing chemicals and related materials need to obtain those ingredients in a certain quantity as well as a certain quality. This poses questions on sustainability: where do materials come from, how do they get to the plant and how do they continue their voyage? The question is how pharma and chemical companies can design their supply chains to make them more sustainable. A digital twin of the supply chain network can help to disentangle complex supply chains in order to streamline processes and to make better decisions faster.

Michael Wallraven,
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Germany

The Supply Chain as a Sustainability Factor

A look at the pharma supply chain makes it obvious that incorporating suppliers is a key for a more sustainable network. According to a McKinsey estimate, 90% of companies' environmental impact derives from their supply chain — from multiple sources. Carbon emissions are one. Although supplies can be delivered to plants via pipelines, a large proportion is still shipped on roads or water. However, it is not only transport; the processing of chemicals at industrial scale can lead to the emission of pollutants as well.

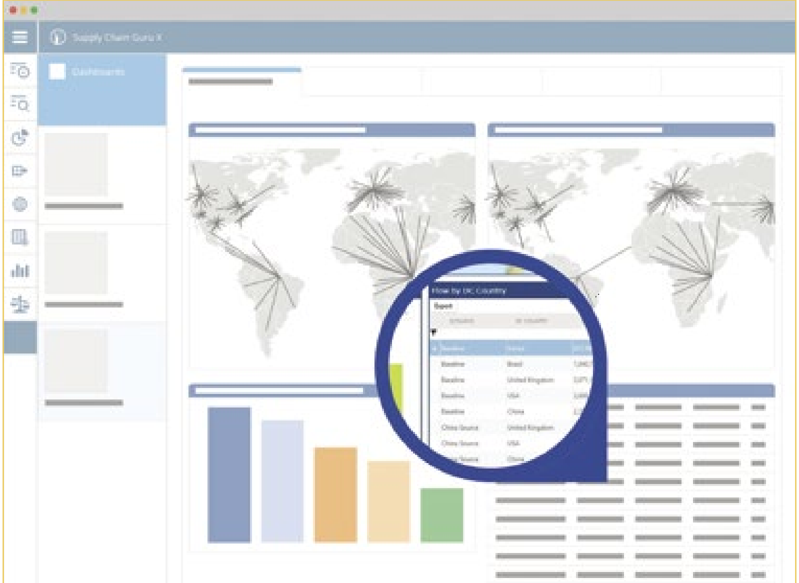
Customers are increasingly aware of sustainability and make purchase decisions accordingly — also when it comes to pharmaceutical products.

A study conducted by Llamasoft and the Economist Intelligence Unit found that growing concern for sustainability is changing how companies do business. They are caught between a growing demand for sustainable business and the necessity to be profitable. However, sustainability goes far beyond an organization's environmental footprint and includes social and financial risks. In this report, sustainability is defined as an organization's ability to operate without violating ethical norms, compromising social structures or depleting natural resources for future generations.

According to the report, the majority of companies perceive sustainability and profitability as equally important. Especially large enterprises measure the impact on their supply chains. Pharma and chemical companies are mainly large enterprises and are consequently more likely to invest in sustainable supply chain strategies.

The reasons for this are manifold, as the study results underline. The importance of responsible business practices, cost savings and growth opportunities all rank around 35%. Public goodwill, pressure from customers and regulatory compliance are important factors too, all ranking around 20%.

There are fairly obvious examples illustrating how profitability and sustainability are not mutually exclusive. To reduce emissions means to spend less on gasoline and electricity. Creating less waste, e.g. by using less packaging material, also helps to cut costs as does the re-use of packaging material. Yet the study shows that increased costs are the largest impediment to supply chain sustainability. 38% of respondents believe this. At the same time, 34% of supply chain decision makers ex-



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A digital twin of the supply chain helps to monitor sustainability along the entire network. The right technology in place enables companies to make the right decisions faster.

pect a more sustainable supply chain to cut costs.

Supplier Management for a more Sustainable Supply Chain

Supplier management is a key ingredient for companies to make their supply chains more sustainable. Popular approaches are to score and certify suppliers on relevant metrics and link these scores to purchasing decisions, developing public sustainability awards, and advising suppliers on technology and approaches. The chemistry and life sciences industries are generally well-versed when it comes to certification processes.

Incorporating suppliers into the sustainability strategy however brings a number of organizational questions as many factors need to be looked at. The sheer number of third parties large chemical and pharma companies' work with pose the biggest challenge. Some of them provide raw materials and other chemicals others are logistics partners or subcontractors. Third party manufacturers are another example. They all contribute to expanding the supply network's complexity.

While there are dozens of steps a company can take to make their supply chains leaner and greener, in these highly complex, global supply chains, the most obvious solutions may not be the right ones, with a small improvement in one area often driving disproportionate cost and waste in another.

A Digital Twin for a more Sustainable Supply Chain

Making the right decisions, taking into account all trade-offs and constraints, requires both a complete view of the end-to-end supply chain and a detailed understanding of product flows, assets, customers and mechanisms by which their requirements are met. To achieve this, many global organizations are turning to technology to build "digital twins" of their real-world supply chain, providing a risk-free environment in which to ask, and answer, unlimited "what-if questions".

This allows them to identify where there is potential for improvement from a sustainability point of view

"Supplier management is a key ingredient for companies to make their supply chains more sustainable."

and also shows how these improvements affect operational costs and service levels. The digital twin visualizes distribution routes, gives insights on taxes, tariffs, prices for raw materials, supplier and distribution costs as well as CO_2 emissions, allowing companies to identify the optimal supply chain to meet their service, sustainability and profitability targets.

Thus, assessing the outcome on costs, distribution routes, product quality, time to market etc. will get easier. Based on these results, companies can assess whether a supply chain optimized on sustainability will lead to increased or reduced operational costs. As a digital twin supports the revision of distribution routes, it can enable companies to find more efficient routes with a positive effect on both transportation costs and the CO_2 footprint. It is fed with the data from supplier assessments, with prices for raw materials, tariffs, taxes, energy and many more. Companies get the big picture of the entire supply chain network and can identify the potential for improving its environmental footprint.

Companies across all industries recognize the need to improve their sustainability footprint and increasingly see an economic necessity for action. The concept of incorporating their supply chain networks into their sustainability strategies is still in its infancy. However, it gets increasingly important. Working with sustainable third party suppliers can form an important part of a sustainable supply chain. This may not solve the dilemma of sustainability and profitability but the potential is there. Customers, shareholders but also employees increasingly demand sustainable business practices. So do regulatory requirements, especially in the pharma and life science industries. This can impact sales results directly. Additionally, sustainable business partners do not necessarily need to be more expensive.

A digital twin of your network helps to monitor the sustainability of the entire supply chain. It lets users see the prospective outcomes of a supply chain optimized toward sustainability in a digital environment. Companies using such technology will find it easier to keep their supply chains and thus their entire business more sustainable.

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Asia's Very Own Challenges in Logistics

Pharmaceutical Logistics in the Asia Pacific Region

The growing Asian markets have proven to be of utmost interest for the pharmaceutical industry. At the same time, logistics providers are facing diverse market conditions depending on the maturity of the market and its political system. The pharmaceutical industry in Australia requires different mechanisms than the structures in China. Also, logistics hubs in the region need to be defined strategically.

The APAC (Asia Pacific) region has led the worldwide pharmaceutical CAGR (Compound Annual Growth Rate) at 6.1% from 2015–2018, more than double that of the LATAM (Latin America) region and triple of the Western European region. This growth has been primarily attributed with the rising income, increased purchase power of the lower and middle social class, government spending and increased health awareness mainly in emerging markets such as India and China. GDP growth in countries like India and the Philippines are occurring at a 6–7% annually increasing overall healthcare expenditure. Moreover, factors such as the percentage of population over 65+ years and increased life expectancy have also played a major role in providing new business opportunities to the pharmaceutical industry within the APAC region.

Among Asia's most attractive markets are China and India; with an expected GDP growth of 6.4% in China and a 7.4% in India from 2017 to 2019. Mature markets such as Japan and Australia show less expected GDP growth compared to the developing markets of Asia, however, exempt higher healthcare expenditure as a percentage of GDP leading to great opportunities for the pharmaceutical industry.

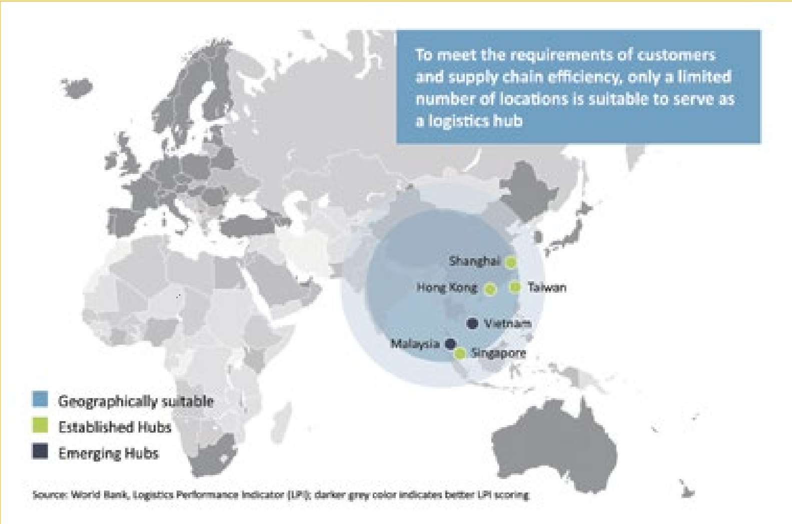
Andreas Gmür, Camelot Management Consultants

Sebastian Scherer, Camelot Management Consultants

Asia's Strong Generic Drug Competition

As a downside, with often large populations, underfunded healthcare systems and large distances, we see high disparity in delivery lead times within the developing Asian markets. For example, in India and Indonesia the logistics setup for major centers is relatively efficient, unlike for the rural regions logistics networks that are still undergoing development.

Another challenge for international pharmaceutical companies in Asia is the traditionally strong generic drug competition. With China pi-



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Established and emerging hubs for the pharmaceutical industry in the APAC region. Only a limited number of locations is suitable to serve as a logistics hub.

loting a new bulk purchase price-cutting scheme, reportedly only 2 out of 31 contracts were landed by multinational pharmaceutical companies. After a brutal bidding round with price cuts up to 90%, 29 drugs will be provided by local firms. Furthermore, in other markets, there are tendencies for tighter control of drug prices, which is further restraining profits in the region.

For instance, Japanese National Health Insurance is reviewing drug prices annually nowadays; the 2018 review led to a 4.6% reduction in Japanese sales and the sector's sales is assumed to fall by 30% until 2025. Likewise, the increased governmental spending on the healthcare sector in India is prompting public hospitals and medical care centers to use generic products to cut costs.

Diverse Local Markets Due to Political and Economic Differences

The logistics requirements for the region are extremely heterogeneous. The very mature markets, like Japan and Australia, require a highly efficient logistics setup. Although the country is also dealing with large distances, next day direct-to-pharmacy distribution service across Australia is standard. The focus for the developed markets for the upcoming years will be on innovation and patient specific logistics solutions for new therapies.

For the developing markets, the picture is yet more diverse. Both the Indian and the Chinese pharmaceutical markets are highly fragmented, with China having almost 13,000 distributors nationwide and India having almost 60,000 distributors.

"Logistics requirements for the APAC region are extremely heterogeneous."

"Last mile" logistics clearly create a challenge for manufacturers and importers to access the market. Distributors often rely on sub-distributors that lack pharma logistics know-how and/or are oblivious to the logistic requirements. This results in negative impacts on the pharmaceutical industry due to the sensitivity of the transported products. This issue is aggravated by the special weather conditions in the tropical and subtropical regions of Asia. During summers, the temperatures can reach up to more than 45 °C, requiring special care with temperature-controlled logistics. Unfortunately, many distributors lack the capabilities and/or the training to do so.

The year 2018, however, has shown major improvements within at least China's distribution system. The government has been taking actions such as the Two Invoice System that requires there to be only one distributor between the manufacturer/importer and the medical care center/hospital (accounting for 70% of drug sales in China), to reduce the number of small distributors significantly. Moreover, China's bigger distributors have been expanding through M&A. This consolidation will increase their capabilities in providing nationwide services to pharma manufacturers and importers. Major pharma distributors in both markets are now also providing pharmaceutical companies with suitable temperature-controlled logistics solutions and a nation-wide distribution service, thus, better access to markets and specifically rural areas of the countries.

Impact on Distribution Solutions

To compete with the price pressures from the government, customers, and generic products competition, pharmaceutical companies (mostly American and European) are prompted to cut transportation costs. Specifically, when discussing low value products with production facilities either in Europe or the America's, transportation costs outbalance the costs of outsourcing production to local production facilities in the APAC region to minimize transportation. Setting up a local manufacturing or packaging site within a market has become an increasingly common practice within the Asian pharmaceutical industry. These facilities often meet demands of the local markets, as well as the neighboring countries. Another strategy is to combine the aforementioned approach with a local logistics service provider (LSP) for distribution.

"Last mile" logistics create a challenge for manufacturers and importers to access the market."

Many pharma companies prefer to opt for the DC (distribution center) or Hub strategy, where production of goods (especially high value goods) are maintained in their original plant setup, and then shipped to the region to a regional DC. Inbound logistics is made easier if sent to a logistics hub within the region, where inventory can be stored in a regional DC. Moreover, the fluctuations in demand within each country can be better met at a lower cost, thus, reducing the need for repackaging and rework.

A prerequisite of this approach is the need to set up a regional distribution center (RDC) in a strategic location in terms of proximity to the market, but also, well-regulated environment with developed logistics capabilities and reliable logistic partners.

Regional DCs, which can serve as gateways to the market, can also serve as postponement points in different logistics hubs within the APAC region. Due to the disparities among the different countries in the region, specifically language differences and packaging requirements, some pharmaceutical companies are choosing to apply postponement strategies for secondary packaging within regional DCs to meet the APAC market demand. This provides supply chain flexibility and postpones the complexity of providing pharmaceutical products to the APAC region to the very final steps. The redressing of designated products is carried out at the RDC through adding country specific labelling and leaflets.

During the last couple of years, Singapore has been viewed as a logistics hub leader for the pharmaceutical industry within the APAC region. Around 80% of the world's top 25 LSPs are operating and investing in their operations in Singapore, providing logistics solutions and customs facilitation to their pharma clients. Setting up a logistics hub in a developed country such as Singapore can provide pharmaceutical companies with various advantages within their supply chain, thus, enhancing product security, reducing damaged goods, the amount of controlling required, risks and distances to final markets, thus, lead times and order quantities.

Based on the demand-center of gravity, Taiwan, Hong Kong and Shanghai are locations we often encounter in our projects. Emerging new hubs in the APAC region from our perspective are Malaysia, where typically both operational and indirect-tax assessments present positive aspects for multinational pharmaceutical companies, and Vietnam due to its low wages, strategic location to China, improving infrastructure and business-friendly political environment.

It will be interesting to see how the situation in Asia evolves. Pharma companies are well advised to monitor these developments closely.

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Rail Cargo: Back to the Future

Adjusting Existing Software Infrastructure in the Chemical Industry

An intelligent enterprise is, as we know, data and process driven. The data feeds intelligence which in turn feeds process automation and innovation. This implies that the available data at least have to be connected — a statement that seems very logical but sadly not always is the case. The chemical industry is known for its professionality and innovation. Chemical industries are used to spend large amounts of money on R&D year by year, but sometimes certain aspects of business doing tend to be forgotten when it comes to innovation.One of those aspects is rail freight transport.

Rail cargo is still being handled and executed like 100 years ago, heavily depending on manual, human interventions. Where all other transport modes are connected and being automated, rail freight mostly is not, often remaining a blind spot to the chemical companies.

In a way this is very strange as rail freight stands for “bulk in & out,” meaning that most of all invoiced goods will travel via rail implying that however efficient the production may become, the real capacity will be dictated by the bottleneck called “rail”. So why hasn’t there been a much stronger focus on the rail transport efficiency until now?

Just imagine that rail freight transport tomorrow would suddenly become 30% easier. The efforts to increase production and sales of more products would be marginal, so that the improvement of the railways, i.e. the innovation in rail transport, could be a real driver for sales and earnings increases.

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Reduce Repetitive Manual Labor

At Ovinto we were amazed to see how the industry is putting effort in operational efficiency on the one hand but continues to handle rail cargo in a very archaic way on the other hand. We noticed that large industrial players invest very heavily in back office software platforms, connect trucks, planes and ships but often forget to connect and automate rail freight.

From this came the idea and mission for us to develop a platform, dedicated to help the existing software infrastructure in these industries when it comes to rail freight.

The goal and purpose of this platform is to connect all relevant internal and external data sources, digitize all data, automate repetitive manual actions, enrich and preprocess the gathered data to feed the results into the relevant existing software modules that were before constantly waiting for manual input.

By doing so we drastically reduce repetitive manual labor and we also

© Ovinto

Frederick Ronse, Ovinto

drastically reduce errors. The existing software infrastructure is able to speed up and become even more efficient as it doesn’t have to wait for input all the time.

Summarized this means that we have developed a platform dedicated to feed and be of service to existing SAP modules to enable them to speed up with less input errors when it comes to rail and intermodal freight of course. Following are some examples and use cases.

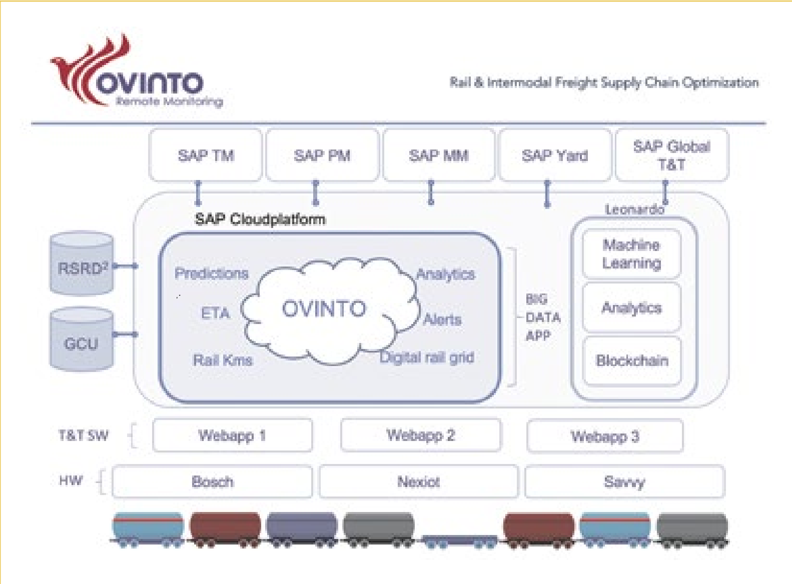
Predictive ETA Services

From the moment we start to analyze rail freight trajectories, the generated data can be used to create intelligence that is being fed back to the planning system. By analyzing all historical transports/trajectories of a fleet of rail cars it becomes possible to calculate the exact average speed per specific segment of rail track in the grid. Next to the speed, also the percentage of risk of having a delay can be calculated leading to the possibility of comparing actual data with calculated and analyzed historical data to find out how the current trajectory is related to the planning and the created intelligence out of the history.

By doing this, predictive services can be created to warn shipper, operator but also the customer about possible delays and anomalies during transports. Because of the repetitiveness of the transports, predictions only become better in time offering a better and better accuracy to all stakeholders taking the biggest pain away in the rail freight sector: the blind spot.

Integrating ETA analysis (ETA = estimated times of arrival) back into the planning software module will allow a higher rotation because of a much faster adaptation to new situations as the transport planning module will be informed sooner and better.

Thus, not only the maintenance can be improved but also the transport rotation — a.k.a. real business — can be improved.



Rail & intermodal freight supply chain: The cloud platform is the ideal development environment to start very small and simple but always keeping the possibility of scaling up and connecting more and more components.

Safety Stock and Production Planning

As from the moment anomalies can be predicted and planning is improved this can be connected to the production planning of the company. Until today, industrial production facilities often encounter near shutdowns or even shutdowns because of hitches in the supply of raw materials.

Trains come in late, don't come in at all or don't carry all planned rail cars. To cope with these irregularities, companies tend to increase their safety stock but even that is not always sufficient.

Predictive services enable production sites to respond faster and avoid costly downtime. Because of the already mentioned improving character of predictive services, the "peak" anomalies constantly become smaller leading to the situation where companies can start to lower their safety stocks as the irregularities become smaller.

"Just imagine that rail freight transport tomorrow would suddenly become 30% easier."

A reduced safety stock will have an immense impact on the business as next to the financial impact there often will be also a "safety related impact" when considering dangerous goods.

In Transition: Machine Learning Services

The famous saying "garbage in, garbage out" is of course also applicable to the rail freight industry. Bill of ladings in planning software will often be based on the manual input regarding which assets are being used.

Many times the trains are assembled in the yard of industrial companies, where pen and paper are still used, and these documents are then manually translated by another colleague into a software program. These procedures leave a lot of room for errors that cannot easily be traced or filtered by the software afterwards.

Countering this problem can be done by implementing machine learning services such as optical recognition services by using a camera or smart device. By scanning the rail cars, exact ID recognition can allow for an automatic train composition and leading to an automatic creation of the bill of lading avoiding costly, repetitive, manual actions and more important also avoiding a lot of errors which will, again, have a direct impact on the business and efficiency.

We could continue to list use cases, but the above-mentioned examples should already give an impression of the phenomenal impact on business we can generate when making rail cargo much more efficient.

Summary

As we want to connect as much data sources and feed existing software modules, we deliberately chose to build our platform in the SAP Cloud Platform using the power of the in-memory database HANA. The cloud platform is the ideal development environment enabling us to start very small and simple but always keeping the possibility of scaling up and connecting more and more components (see figure).

Making rail and intermodal freight transparent and more efficient is not only helping the supply chain of the stakeholders involved. Studies of the European Union showed that if we were able to put 4% more freight in rail transport, this would immediately result in more than 9% less road transport! Thus, making rail freight more efficient will drastically help us in reducing our emissions and improve our congestion and mobility problems.

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Trafigura and Altis Form Trading Joint Venture

Trafigura is forming a joint venture with US privately held trading and logistics company Altis Group International to create a commodity petrochemical trading business with a focus on bulk liquid chemicals.

The jv will comprise two entities — the existing Altis Group based in Houston, Texas, USA, and Altis International (Singapore), which will have a branch office in Geneva, Switzerland.

"We believe that the time is right to start exploring the potential of this market," said Tom Jay, former head of Trafigura's deals desk for refined metals, bulk and concentrates. He added that the petrochemicals market is expected to grow significantly over the next few years. Jay and Chris Clarkson, Trafigura's head of gasoline trading, will join the boards of the new venture.

Jeff McNear, president of the Altis Group International management team, said the jv will accelerate Altis' growth and ability to expand its trading reach globally.

Earlier this month, Trafigura announced it was to become the owner of major mining group Nyrstar. The Geneva-based trading house is also partially funding a chemicals plant to be built by Finnish nickel and cobalt mining company Terrafame. The plant at Sotkamo, Finland, will produce chemicals for use in electric vehicle batteries, with commercial production expected to start in early 2021. (eb, rk)

Vopak Sells European Terminals to Investor

Following a strategic review announced in August 2018, Royal Vopak is selling three of its European terminals.

The tank terminal operator has come to an agreement with First State Investments to sell the facilities in Algeciras, Spain; Amsterdam, the Netherlands, and Hamburg, Germany, for €723 million, of which €15 million is subject to certain revenue conditions.

The total combined operational capacity of the three terminals is nearly 2.3 million m^3 and the transaction is expected to close in the second half of 2019.

Eelco Hoekstra, Vopak's CEO, said the deal marks the next step in delivering the company's strategy and aligning its portfolio based on long-term market developments. In Europe, he commented, the main focus is to further strengthen its position in the major industrial clusters Rotterdam and Antwerp.

Globally, Vopak currently has more than 2 million cubic meters under construction, and new projects still to be announced are planned to grow the portfolio with a focus on industrial, chemical and gas terminals and to maintain its strategic position in hub locations.

First State Investments is the international investment arm of Colonial First State Global Asset Management, which is part of the Commonwealth Bank of Australia. (eb, rk)

FECC Congress

On Jun. 12–14, 2019, the FECC Annual Congress will take place in Sitges, Spain and focuses on how to boost relations with suppliers and customers in order to successfully face the challenges ahead. In today's competitive global market, distributors face not only growing compliance demands but also strive to increase the added value to their partners in the supply chain. About 200 delegates, from business leaders to stakeholders, attend the congress every year to network, generate new business and reinforce existing relationships.
www.chemicalsamerica.com

EPCA Annual Meeting

The annual meeting of the European Petrochemical Association (EPCA) provides a unique platform for the global chemical business community to network, discuss collaborations and developments and hear from an impressive line-up of world-class speakers. Participants not only have the opportunity to network with peers and discuss business development opportunities, they can also have access to EPCA networking events and lounges, accommodation and meeting rooms. The event will take place on Sept. 6–9, 2019, in Berlin, Germany.
https://epca.eu

Chemspec Europe

Chemspec Europe will take place from Jun. 26–27, 2019, in Basel, Switzerland. The event is the key platform for manufacturers, suppliers and distributors of fine and specialty chemicals to showcase their products and services to a dedicated audience of professionals in the industry sector. The product portfolio of this international exhibition covers a maximum range of fine and specialty chemicals for various industries. Excellent networking opportunities and top conferences presenting the latest results of ongoing R&D projects round-off the show.
www.chemspeceurope.com

CPhI Worldwide

CPhI Worldwide, taking place on Nov. 5–7, 2019, in Frankfurt, Germany, together with co-located events ICSE, InnoPack, P-MEC and FDF, hosts more than 45,000 visiting pharma professionals over three days. 2,500+ exhibitors from more than 150 countries gather at the event to network and take advantage of free industry seminars. Every sector of the pharmaceutical market is represented under one roof. In 2019, two new podiums will be introduced: Natural Extracts and World of Pharma.
www.cphi.com

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