



E-Business and Chemical Distribution: Disintermediation 2.0 ?

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In mid-2015, BASF opened its first e-commerce store in China, using the Alibaba B2B marketplace platform. According to the company press release, with this step, “BASF is making its solutions more accessible to small and medium-sized enterprises (SMEs)”. This is one example of the growing importance of e-commerce in chemicals. In this paper, we want to examine the rationale behind these trends and point out likely future developments.

Traditionally, the majority of chemicals are sold directly from the producers to the users. Given that chemicals are rarely directly used by consumers, most of the chemical buyers are themselves businesses using chemicals to create a wide variety of finished goods including items such as feed, food, paints, plastics, textiles, etc. The other major distribution channel is via chemical distributors. These distributors get their goods from the chemical companies and then sell it on to the same broad group of buyers. The main distinction between the first channel (direct sales) and the second one (indirect sales) is thus the presence of an intermediary. Typically per-order volumes of indirect sales are much lower (according to a BCG estimate, 79% of manufacturers outsourced their chemical distribution to distributors for customers buying less than Euro 100 000 of products per annum while larger customers buy directly from the chemical manufacturers). Distributors partly compensate for this lower volume sold of each product to individual customers by offering a broader portfolio. Typically

they are not restricted to a single chemical producer as supplier but try to offer complementary products targeting the same customer segments.

E-commerce marketplace providers offer the producers a third channel to sell to customers. While it may technically be regarded as a variation of direct sales as the platform involved typically does not take ownership of the product, it is different from direct sales in that order handling, logistics and customer fulfillment are automated and aggregated to reach higher volumes and lower costs. Another main advantage to the producers is the high volume of traffic drawn to a multi-party e-commerce marketplace. In fact, looking at the BASF press release shows clearly that the company hopes to replace indirect rather than direct sales via this new channel. Target customers are SMEs: “For example, from Shandong, Sichuan, to Guangdong, China has over 10 000 feed processing factories, most of which are small and medium-sized enterprises. With BASF Alibaba online shop going live today, more small and medium-sized feed processing factories can learn about authentic feed additives from BASF and obtain relevant support.”

Clearly, at least 99% of the 10 000 feed processing factories mentioned in the press release are currently not served by BASF directly but rather by distributors or not at all. Thus if taken up by the customers, the e-commerce channel will mostly replace sales via distributors, resulting in a potentially higher margin for BASF, though of course BASF certainly also hopes for

additional sales to customers currently not covered by either channel.

Veteran chemical industry watchers will probably be somewhat skeptical about the power of e-commerce to effect disintermediation of chemical distributors. After all, chemical marketplaces have been around for more than 15 years, and at the same time broadly speaking chemical distribution has not grown any slower than the industry as a whole. However, we feel that the integrated online marketing and offline distribution capabilities that the e-commerce marketplace providers offer to producers will accelerate their adoption by the industry players. The recent rise of social media and online communities, built as part of the e-commerce marketplace platforms, can substantially increase the attractiveness of this channel. Consequently, e-commerce represents a real threat to the continued growth of traditional third-party chemical distribution.

Research published by Tay and Chelliah in 2011 identified several important functions of chemical distribution which at that stage could not be delivered by e-commerce platforms without support by local intermediaries. These were “On-Time Delivery”, “Product Availability”, “Credit Payment” and “Technical Support”.

Given the excellent network of courier services in China, it is likely that on-time delivery is no longer an issue if the e-commerce marketplace providers have their own delivery service and customer fulfillment capabilities, or use third-party logistics providers (3PL), and the time to



fulfill customer orders does not need to be shorter than 2-3 days. This only leaves a role for a third-party chemical distributor located nearby if the order needs to be fulfilled very quickly, or if the type of the chemical ordered is not suitable for normal courier delivery.

Similarly, product availability may actually be less of an issue for an online store than for an individual distributor. Given the delivery capabilities above, this will only require one warehouse per region. Thus adequate stock levels should be easier to maintain than at a multitude of locations of individual chemical distributors. In addition, the customer and delivery data gathered and accumulated by an e-commerce marketplace over time will allow a producer to employ big data and predictive analytics to perform accurate stock planning and demand forecasting, further increasing the average product availability.

However, credit payment is likely to remain an issue for e-commerce. Providing credit is an important function of third-party distributors in China, and it is unlikely to be provided by a company such as BASF which lacks the knowledge of the credit trustworthiness of small customers. So this function is unlikely to be affected much by a rise in e-commerce

unless an e-commerce marketplace provider is willing to take ownership of the goods and take the credit risk.

Finally, technical support is a function in which e-commerce marketplace providers can excel, especially with the advent of social media and online communities. Traditionally, big chemicals producers did not give technical support to small customers due to the high costs involved, leaving this service to their distributors. By setting up online communities and technical discussion on the e-commerce platforms, chemicals producers are able to offer timely and critical knowledge and information to their customers at fairly low costs. The BASF press release hints at this aspect when stating that factories can learn about authentic feed additives from BASF and obtain relevant support.

The potential margin improvement of switching from third-party distribution to e-commerce marketplaces has already been mentioned. There are also several other benefits. At the core is the better understanding of the market and keeping a close tab on the requirements of customers. Using third-party distribution, the producers will not be able to get hold of valuable customer data such as their purchase history, average order size, preferences and

delivery schedule. The shift to e-commerce remedies this lack of transparency. In addition, while initially the introduction of an e-commerce platform might lead to a conflict of interest with existing distributors, there is also the potential for later reduction of such conflicts, e.g., when a customer becomes bigger. It should not be a major issue to transfer a customer from using an e-commerce platform to being served directly by the BASF sales force; however, switching from a distributor to direct sales routinely leads to conflicts.

E-commerce platforms by now have reached a level of maturity that allows even major players such as BASF to utilize them with confidence. The investment of such a step is low as the platform already exists, eliminating the need to establish an own solution. Customer traffic is already strong, reducing the need for specific marketing of the new channel. Overall, as additional functionalities will be added to platforms such as Alibaba, we expect the role of traditional third-party chemical distributors to shrink and to be mainly restricted to giving credit to less credit-worthy chemicals customers and to providing emergency deliveries of chemicals. It remains to be seen whether these functions are sufficient for a sustainable business model. ■

Bayer MaterialScience Announces Covestro's Chinese Trade Name

On June 1, 2015, Bayer announced that its MaterialScience business will be renamed Covestro, and Bayer MaterialScience will become a separate company in September 2015. The Covestro's Chinese trade name will be 科思创 [ke si chuang], which represents a bold new direction and bright future for an innovation-driven polymers company.

* 科 [ke] - signifies science and innovation, and further reflects collaboration

with customers, employees and others close to our business;

* 思 [si] - represents a company with talent and forethought. We are in leading position in the market and have a strong workforce, relying on which we can build our future success;

* 创 [chuang] - shows a company that is well-invested in state-of-the-art manufacturing facilities with a proven track

record of excellence and commitment to value creation.

President of Bayer MaterialScience Greater China, Steffan Huber said, "Our Covestro's Chinese trade name 科思创 strongly symbolizes the company's commitment to driving growth through profitable technologies and products that benefit society and reduce impact on the environment in China." ■