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Hannes Utikal and Julia Woth

From megatrends to business excellence: Managing change in the German chemical and pharmaceutical industry

Werner Kreuz

Can a top-executive in the chemical industry “survive” without a Business Coach?

Wolfgang Falter

Size does matter in chemical distribution

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Letter from the Editor

11th anniversary of the Journal of Business Chemistry

11 years ago, the first issue of the Journal of Business Chemistry was published by the Institute of Business Administration. Since then, 33 issues including 60 research papers, 50 articles within the practitioner's section and 20 commentaries have been submitted, revised and set in layout in order to inform the business chemistry community about new insights either in research or in practice, and therefore, to accelerate scientific discussions and to support or even advance management in chemical and related firms. In addition to the variety of topics ranging from analyzing diverse technological fields such as nanotechnology or biotechnology over (economic) trends within the chemical or pharmaceutical sector to manifold strategic implications, e.g. concerning R&D, portfolio, risk/regulatory, innovation or account management, we have received contributions from all over the world.

We would thus like to thank all contributors, readers and editors who accompanied us along the way and hope for more interdisciplinary insights on challenges and countermeasures within the field of business chemistry in the future!

Speaking of the future, the present issue comprises latest findings on how chemical and pharmaceutical companies (might) respond to megatrends, deals with business coaching for executives in the chemical industry and addresses the current situation and future trends in chemical distribution.

The first article of this issue "From megatrends to business excellence: Managing change in the German chemical and pharmaceutical industry" by Hannes Utikal and Julia Woth presents some results of a study jointly conducted by the University of Münster, the Provadis School of International Management and Technology, the association VCI, the consulting firm PWC strategy& and the CHEManager. The authors provide details regarding the trends creating a need for business transformation and the corresponding degree of preparation for these upcoming changes, whereby segment-specific differences emerge when distinguishing between companies either focusing on base chemicals, specialty chemicals or pharmaceuticals. The article concludes with some managerial implications. Further information and results are available at www.chempharmtrends.de (in German).

In the article "Can a top-executive in the chemical industry "survive" without a Business Coach?", Werner Kreuz emphasizes the necessity of individualized business coaching for top managers. The author describes the four steps of a coaching process and uses particular case examples in order to illustrate the benefits a business coach can provide so that his or her Coachee is able to improve his or her management expertise and leadership style.

The paper of our Practitioner's Section "Size does matter in chemical distribution" by Wolfgang Falter refers to current consolidation trends within European chemical distribution. By combining data from various sources, the author presents the main actors, their relationships as well as growth rates within the European market. By highlighting the differences in distributing commodities and specialty solutions, the main reasons associated with M&A activities between distributors are identified. The article forecasts size to be an important factor leading to the development of a group of second tier chemical distributors.

Please enjoy reading the second issue of the twelfth volume of the Journal of Business Chemistry. We are grateful for the support of all authors and reviewers for this new issue.

If you have any comments or suggestions, please do not hesitate to contact us at contact@business-chemistry.org.

Birte Golembiewski, Executive Editor
(bg@businesschemistry.org)

Commentary

From megatrends to business excellence: Managing change in the German chemical and pharmaceutical industry

Hannes Utikal* and Julia Woth*

* Provdadis School of International Management and Technology, Industriepark Höchst, 65926 Frankfurt/Main, hannes.utikal@provdadis-hochschule.de

1 An industry in transition

The chemical and pharmaceutical industry is an industry in transition. In the past, the chemical industry always altered modern life through the transformation of new scientific findings into marketable products. Business historian Alfred Chandler describes the success model of companies in the chemical and pharmaceutical industry as follows: Successful companies transferred findings from basic research into marketable products and used the profits and learnings from each generation of new products to commercialize the next generation (Chandler, 2005, p. 309). This model of success is in question. Nowadays, companies have to consider that science and technology essential to the growth of high-technology companies might stop being the engine for innovation and growth. The chemical industry with its periods of research-based growth between the 1880s and 1920s and again during the 1940s and 1950s has to cope with the situation that, since the 1950s, chemical sciences and engineering have ceased to generate major new product developments (Whitesides, 2015, p. 3196; Schröter, 2007, p. 57). As a result, product and process development gain more importance for successful companies in the chemical industry than basic research. For the pharmaceutical industry, on the contrary, the success model of generating new products through basic research findings has not stopped yet: In the 1960s and 1970s, biology and related disciplines – microbiology, enzymology, and the beginnings of molecular biology – were forming the new basis for additional new products, and since the 1980s, new findings in the field of biotechnology fuel the development of innovative products on the basis of basic research findings (“The Biotechnology Revolution”). Chandler thus concludes that *“in the beginning of the twenty-first century, the chemical industry is no longer a high-tech industry. Pharmaceuticals, how-*

ever, remains a dynamic high-tech industry as biotechnology is contributing to revolutionary changes on the scale comparable to those of the Second Industrial (...) Revolution (...) in the 1880s.”

2 Trends driving change

Different authors have been working on the future of the chemical industry (Whitesides, 2015; VCI, 2013; VNCI and Deloitte, 2012). Often, they have analyzed the impact of so-called “megatrends” on the future development of the industry. These long-term trends are defined as drivers of change that affect all parts of society (business, society, and politics), may have a global reach and typically last for more than 20 years. With the help of these megatrends and their complex interplay, political institutions, industry associations or companies create different scenarios in order to shape different pictures of the future. Industry associations use these pictures to communicate to politicians about potential opportunities and risks for an industry, companies to identify relevant fields for action, e.g. the need for cost cutting in one division and the need for investment in another. For managers, the megatrends serve as a common frame of reference when analyzing the need of business transformation in the chemical industry.

There are different ways to group trends for the chemical and pharmaceutical industry (cf. Whitesides, 2015; VCI, 2013; Johansson *et al.*, 2012; Matlin and Abegaz, 2011). A large-scale online survey (called “From megatrends to business excellence”) analyzed the need for business transformation in the chemical industry. In this survey, upcoming trends – creating a potential need for transformation – were addressed and participants asked about the relevant management activities to cope with these trends (for details see Utikal and Leker, 2015). In total, 270 persons participated in the online survey; 141 participants having significant manage-

ment experience in the chemical industry finished the total questionnaire. Out of these, 34% considered themselves as being experts in the segment of specialty chemicals, 16% in the field of polymers, 22% pharmaceuticals, 10% basis chemicals, 8% agrochemicals and 10% in other fields. 50% of the participants are top-managers (board level), 20% are expert in the field of research and development and innovation, 25% have other leading positions in chemical and pharmaceutical companies, and 5% hold other positions. Different company sizes are reflected as well. The results of the survey have been discussed in different workshops with managers and have been the basis for expert interviews with high-level executive managers from the chemical and pharmaceutical industry.

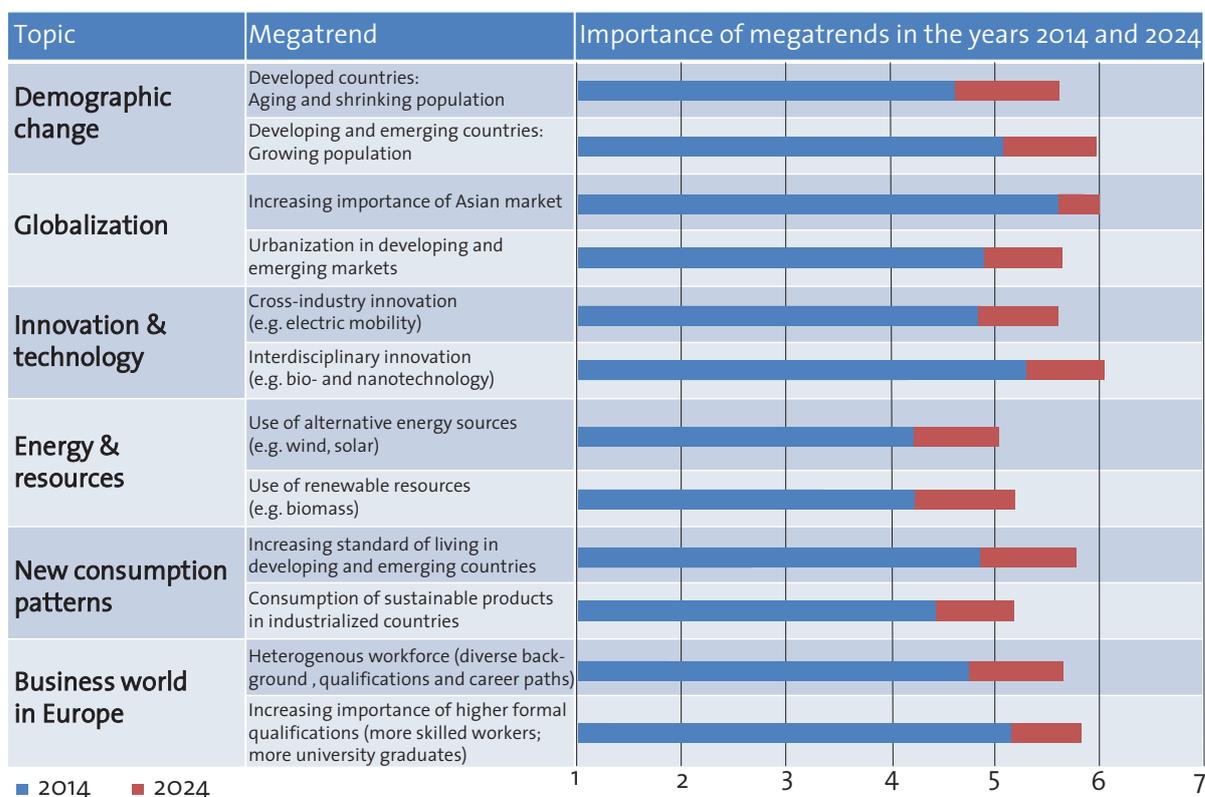
Within this survey, participants were asked to rate the importance of selected megatrends for their business activities in the years 2014 and 2024 (see figure 1). We distinguished five topics and ten trends: (1) Globalization and urbanization, (2) Cross-industry and interdisciplinary innovation and technology, (3) Energy and resources, (4) New consumption patterns, and (5) Demographic change/busi-

ness world in Europe.

Across all segments, the most important trends for the year 2014 are:

- 1) Globalization: The most important and continuing trend is globalization. Participants assume that especially the Asian market will continue to increase in volume and value. Of course, this has implications for the configuration of the value chain and for the steering of business activities.
- 2) Cross-industry and interdisciplinary innovation: Participants state that innovations will still be a key value driver, whereby they expect cross-industry innovation or innovation based on interdisciplinary cooperation to gain further importance.
- 3) Higher qualification: Participants see an increasing importance of higher qualification for the chemical industry.

Figure 1 Importance of different trends for the chemical industry in the years 2014 and 2024 (Source: Industry Study „From megatrends to business excellence“ (2014); Question: How relevant are the following aspects in your opinion for the activities of your business unit/company in the year 2014 and 2024? (1 = not at all relevant – 7 = very relevant); Representation: Arithmetic average of answers).



The chemical industry in Germany is thus getting more international, it opens up to other scientific disciplines and believes in the importance of a highly skilled workforce to attain its goals. It is interesting to see that for the year 2014, so-called “green issues” – e.g. sustainable products, the shift to alternative energy sources and the use of renewable resources – are considered to have the least relevance out of all potential megatrends. At the same time, participants assume these aspects to be of increasing importance until the year 2024.

3 Fields of transformation

Can companies in the German chemical and pharmaceutical industry be adequately transformed in order to realize the opportunities inherent in the outlined trends? Beyond the specific focus on the chemical industry, this question has gained a lot of attention in management literature on organizational change. Organizational change is defined as a difference in form, quality, or state over time in an organizational entity (Van de Ven and Poole, 1993, p. 512). Change processes can be analyzed for multiple entities (e.g. for whole industries) or for a single entity (e.g. a single company). One influential school analyzing change on the level of multiple entities, is the population ecology school stating that the ability of a single entity to change is very limited. This school proposes that a Darwinian view describing change processes as a result of variation, selection and retention may be adequate to understand change processes (e.g. Hannan and Freeman, 1986). The opposite position is taken by the school of planned change. The planned change model views developments on the level of the single organization as a result of an active organization design process where decision makers formulate goals, implement measures and evaluate the impact of these measures on the defined goals (for the different models see e.g. Van de Ven and Sun, 2011). In the following, organizational change is examined from the perspective of a single company. The reasoning is based on the assumption that companies and acting managers have some discretion in actively designing change processes. Organizational change processes can be further characterized with regard to their intensity as incremental or radical changes. Incremental changes encompass minor modifications of the status quo, radical changes have a profound impact on different fields of an organization (Levy and Merry, 1986).

The participants of the survey “From megatrends to business excellence” evaluated to what degree their business unit or company would have to change in the light of the above-mentioned trends (need for change) as well as to what degree

the respective unit is already prepared for this upcoming change (degree of preparation). Across all segments, participants identified a medium need for change. The respondents are thus expecting – on average – more evolutionary than revolutionary change for their companies. The degree of preparation corresponded – only looking at the means of the answers – to the needed change. Additionally, different fields for change were addressed: The participants identified a medium need for change of their company’s strategy and business model and the existing business processes; here they considered their companies as being sufficiently prepared. However, in the fields of workforce qualification and company culture, the respondents identified a relevant discrepancy between the need for change and the degree of preparation. This aspect can be further explored in a segment-specific analysis (see figure 2), whereby the split by industry segments reveals the following interesting differences:

- In the field of base chemicals, respondents identify compared to all other segments the lowest need for change but the highest degree of preparation. This can be interpreted as a sign for respondents considering their business as being stable and already highly optimized. They focus on process innovations and select their production site based on global market demand on the one hand and energy and raw material costs on the other hand. They do not see any far-reaching shift in their energy and raw material basis away from fossil fuels until the year 2024. From the perspective of the respondents, these two drivers will not heavily influence existing operations – even though they are often cited in research and policy publications as extremely relevant trends for the industry segment.
- In the area of specialty chemistry, a higher need for change can be observed. Overall, the degree of preparation corresponds to the needed change, but discrepancies exist in the field of workforce qualification and corporate culture. Obviously, the participants assume that the expected changes in the field of cross-industry and interdisciplinary innovation (identified as very important trends for this segment) imply changes on the side of workforce qualification and the company’s values. The conducted expert interviews additionally revealed that companies in the specialty chemical segment face challenges in implementing the desired change from a product to a solution provider: Given the high complexity and diversity of value chains on the side of their customers, employees have difficulties in determining and quantifying the spe-

cific value their products provide in these different value chains. With regard to cross-industry collaborations in innovation projects, managers identify a lack of knowledge about partners and uncertainties in handling different industry cultures as main deficits. Some companies manage the needed adaptation proactively: For instance, the specialty chemical company Clariant organizes workshops with potential customers in order to get a deep understanding of customer requirements. After the ideation phase, the management mode changes in order to guarantee a short time-to-market. This opening up of the innovation process is a new development.

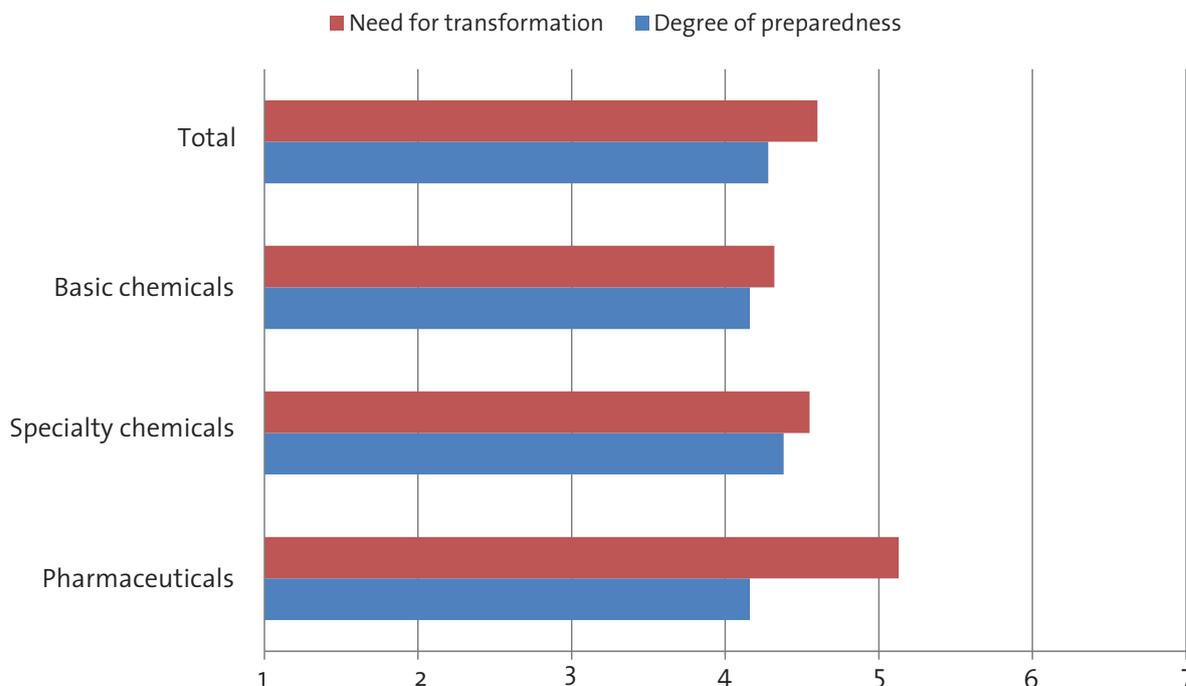
- With regard to the pharmaceutical segment, the biggest need for change and the lowest degree of preparation was stated. A high demand for change is shown across the fields corporate culture, employee qualification, strategy/business model and business processes. Compared with the other segments, it is interesting to see that for pharmaceuticals – with the exception of the topic strategy/business model – the degree of preparation is much lower than the needed change. This holds not only true for the

so-called “soft issues” of corporate culture and workforce qualification but as well for the “hard” fields of business processes. In the expert interviews, this was explained by regulatory requirements decisive for the pharmaceutical industry. These requirements increase costs for continuous process optimizations and sometimes may even prevent them. Some pharmaceutical companies open up their research and production activities and cooperate more than in the past with partners – this change has to be accompanied with a change of the corporate culture as well.

4 Managing evolutionary change

One central conclusion from the study “From megatrends to business excellence” is that companies in the chemical industry do not see the need for a short-term, radical change. This holds true – to a lower degree – for pharmaceutical companies as well. Regarding the intensity of change, companies in the chemical and pharmaceutical industry thus differ significantly from companies in other industries, such as the financial, publishing or music industries. These sectors are confronted with disruptive change initiated by the internet which pro-

Figure 2 Business transformation in the chemical industry: Segment-specific perspective (Source: Industry Study „From megatrends to business excellence“ (2014); Questions: Given the megatrends, how large is from your perspective the need for business transformation in your business unit/ your company? (1 = very small; 7 = very large) How well is your business unit/your company prepared for the change in different fields? (1 = very poorly; 7 = very well); Representation: Arithmetic average of answers).



foundly puts established business models into question. Single chemical and pharmaceutical industries can as well be faced with the need to start and steer profound transformation processes. This holds especially true if they redefine their business and do not only focus on technical innovations but on their role in creating socio-technical innovations in the fields they are working for (e.g. mobility, health, energy production and consumption). To create socio-technological innovations, chemical companies must consider themselves as being part of a wider innovation network with actors from different sectors and a variety of stakeholders.

Researchers from the field of transition management have formulated recommendations on how managers can prepare their companies for change – be it evolutionary or revolutionary in kind. These recommendations may be of value for managers in the chemical and pharmaceutical industry as well (cf. figure 3):

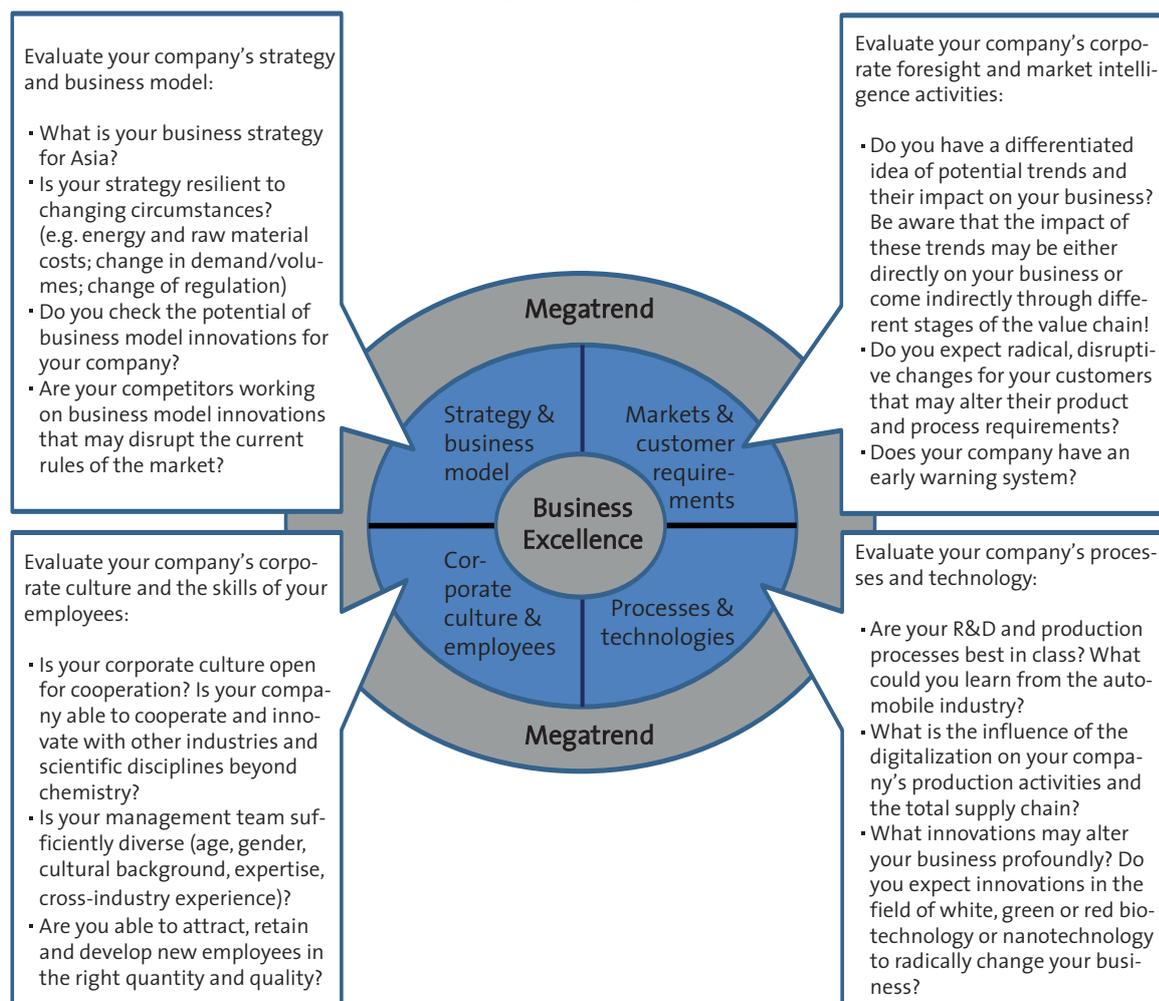
1. Markets & customer requirements

Chemical and pharmaceutical companies need to have an in-depth understanding of the changing market requirements on the different activities in the value chain up to the final consumer market. Given the diversity and complexity of the different value chains chemical companies are involved in, this is a significant challenge. Companies should have discussion platforms involving various stakeholders, such as non-governmental organizations, as part of an early warning system in order to detect weak signals of changing requirements.

2. Strategies & business models

Companies should develop their strategies outside-in and work with scenarios. They can thus guarantee that potential developments are taken into account and simplistic views of the future are avoided. With this in mind, strategies

Figure 3 From megatrends to business excellence: Is your company ready?



and business models should be tested with regard to their resilience in the light of changing circumstances. And ideas for business model innovations may be collected beyond the chemical and pharmaceutical industry.

3. Processes & technologies

Production assets, IT-systems and processes in the field of innovation, production and marketing should be investigated with regard to their flexibility. Of course, this is hard to be achieved in the chemical and pharmaceutical industry with its high capital intensity and regulatory framework. But in times of increasing volatility, flexibility of resources is a company goal per se and may lead to investments in multi-purpose assets.

4. Corporate culture & employees

Corporate cultures in the chemical and pharmaceutical industry will have to open up, so that opportunities of the globalization and innovation across industries and scientific disciplines can be realized. With regard to employee qualification, in-depth knowledge of chemistry and engineering will, of course, be of crucial importance for the success of chemical and pharmaceutical companies in the future as well. However, at the same time, more employees with intercultural, interdisciplinary and knowledge from other industries are needed.

5 Conclusion

Companies in the chemical and pharmaceutical industry in Germany have to focus on their ability to change – even if they consider the upcoming change to be more evolutionary than revolutionary in character. First, they should continue to optimize their current business in order to secure their competitiveness. Second, they should anticipate potential disruptive changes early and work on their value creation capabilities through innovation. And third, they may identify new innovation paths by focusing on the larger socio-technical systems they are working for. The transition taking place in different societal fields such as mobility, food supply, health, environmental protection opens up new opportunities for companies in the chemical and pharmaceutical industry to position themselves in these newly emerging networks and to create new viable business models. Thus, the tension between the “exploitation of current assets and capabilities” and the „exploration of new possibilities“ through innovation, cooperation and new alliances characterizes the fundamental management challenge for companies in the chemical and

pharmaceutical industry in Germany on their way “From megatrends to business excellence”.

Note: The data used within this article results from a study jointly conducted by the University of Münster, the Provadis School of International Management and Technology, the association VCI, the consulting firm PWC strategy& and the CHEManager. The corresponding publication and further information can be found at www.chempharmtrends.de.

References

Chandler, A. (2005): *Shaping the industrial century. The remarkable story of the evolution of the modern chemical and pharmaceutical industries*, Harvard University Press, Cambridge.

Geels, F.W. (2013): The chemical industry in transition?, in: Mohr, R. and Utikal, H. (ed.), *Future Chemistry: Glimpses into the world of tomorrow*, FAZ-Institute, Frankfurt, pp. 192-196.

Giannetti, R., Romei, V. (2007): The chemical industry after world war II, in: Galambos, L., Hikino, T. and Zamagni, V. (ed.), *The global chemical industry in the age of the petrochemical revolution*, Cambridge University Press, Cambridge, pp. 407-452.

Hannan, M., Freeman, J. (1993): *Organizational ecology*, Harvard University Press, Cambridge.

Levy, A., Merry, U. (1986): *Organizational transformation*, Praeger Publishers, New York.

Matlin, S., Abegaz, B. (2011): Chemistry for Development, in: Garcia-Martinez, J. and Serrano-Torregrosa, E. (ed.), *The chemical element. Chemistry's contribution to our global future*, Wiley-VCH, Weinheim, pp. 1-69.

Johansson, Å. et al. (2012): Looking to 2060: Long-term global growth prospects, OECD Economic Policy Paper No. 3, OECD Publishing.

Schröter, H. (2007): Competitive Strategies of the World's Largest Chemical Companies, 1970-2000, in: Galambos, L., Hikino, T. and Zamagni, V. (ed.), *The global chemical industry in the age of the petrochemical revolution*, Cambridge University Press, Cambridge, pp. 53-80.

Utikal, H., Leker, J. (2015): Die Studie: Von den Megatrends zum Geschäftserfolg, in: *Provadis School of International Management and Technology: Von den Megatrends zum Geschäftserfolg*, pp. 5-7 (online: http://www.chemanager-online.com/sites/chemanager-online.com/files/Megatrends_Geschaefterfolg_Chemie_Pharma.pdf).

Van de Ven, A., Poole, M. (1995): Explaining development and change in organizations, *Academy of Management Review*, 20 (3), pp. 510-540.

Van de Ven, A., Sun, K. (2011): Breakdowns, in: Implementing models of organization change, *Academy of Management Perspectives*, **25** (3), pp. 58-74.

Verband der chemischen Industrie in Deutschland (VCI) (2013): *Die deutsche chemische Industrie 2030*, VCI, Frankfurt.

Vereniging van de Nederlandse Chemische Industrie (VNCI), Deloitte (2012): *The Chemical Industry in the Netherlands: World-leading today and in 2030-2050*.

Whitesides, G. M. (2015): *Reinventing Chemistry*, *Angewandte Chemie International Edition*, **54** (11), pp. 3196-3209.

Commentary

Can a top-executive in the chemical industry “survive” without a Business Coach?

Werner Kreuz*

* GrundmannConsulting, Kastanienweg 3, 40667 Meerbusch, werner.kreuz@grundmann-consulting.de

1 Executive summary

Not more than 30 years ago, hiring a consultant was seen by many top executives - not only in the chemical industry - as a sign of “weakness” or of “not being able to cope on my own”. Today, all chemical companies use the knowhow, expertise, innovative strength and manpower of consulting firms to solve their strategic and operational problems, to reduce complexity, to initiate change processes and to develop the company to new levels. And the smarter ones use Business Coaching as a tool to support the executives themselves to cope with the increased demands on flexibility, the endless stream of information and projects generated in fast changing global markets. Highly individualized - provided by experienced and coaching-trained professional managers themselves - Business Coaching turns out to be a very effective tool to support top-executives in the chemical industry. However, it is important that these top-executives work together with Business Coaches, who not only have a deep understanding of the behavioral aspects of a successful manager, but, in addition, have an in-depth knowledge and understanding of the true business and industry issues the manager in the chemical industry is confronted with.

In this article three typical questions, managers from the chemical industry have raised, are used to describe the coaching process with its 4 steps, to elaborate on the differences between “Coaching” and “Business Coaching” and to explain – based on practical experience - how a manager can and will benefit from Business Coaching.

2 Can a top-executive in the chemical industry “survive” without a Business Coach?

In today’s fast changing world, characterized by streamlined processes, optimized resources and unlimited access to information, chemical compa-

nies often do not have enough capacity to solve the company’s strategic or operational issues exclusively with internal resources. As a consequence, it is common practice in nearly all firms to make use of management consultants to overcome these capacity bottlenecks, to avoid pitfalls by relying on the consultants’ expertise and experience, in order to – jointly - develop innovative state-of-the-art solutions and to elevate the company to the next performance level. Twenty/thirty years ago, however, hiring a consultant company was often seen as a “weakness of the management team” and as a “sign of being just not capable enough”.

These days, similar thinking regarding “Business Coaching” can be observed. In sports, whether it is in athletics, swimming, fencing or soccer to name only a few, there is not one top-athlete, not one top-team that is not relying on the experience, the training methods and skills of a professional coach. For instance, even the best soccer players in the world (whether Messi, Ronaldo or Manuel Neuer) follow the tactical guidance, the expertise and match plan of an experienced coach. But how many executives in the chemical industry openly acknowledge that they work with a Business Coach to master new business situations, to learn how to build and lead a team successfully or to adapt their behavior to the expectations set by top-management or customers? Especially managers from leading and very successful chemical companies see the benefits from Business Coaching. They understand that working with a Coach does not endanger their career – in contrary, it accelerates their progress both on an individual basis as well as on being part of a larger management team. The reason for this is straightforward: Business Coaching provides a highly individualized working environment. While specific coaching methods are standard it is, just as in professional sports, the effective usage, combination, and timing that makes all the difference together with the all-important “chemistry” between Coach and Coachee. With the right mixture an improvement process will be initiated that

leads to highly effective changes and quick, tangible and sustainable results.

Typical business situations that have been discussed with Coachees coming from the chemical industry focused on the following questions:

A. "I have been a very successful R&D-manager. Now my company has asked me to take over the full profit and loss responsibility for an entire business unit including sales and operations, areas I have no experience in. How can I quickly learn how to run the business and to meet/exceed the aggressive growth target set by the board?"

B. "I am a chemical engineer with many years of line responsibility. To get to the next management level, the CEO has asked me to lead the strategy department for the next two to three years. What are the key elements to gain strategic insights as quickly as possible?"

C. "In my year-end performance review my boss told me that he is not really satisfied with my contributions and behavior in our management meetings. He specifically mentioned that it is not the content of my input, but how I present my findings and how I react to questions from my colleagues. What do I have to do to improve my personal skills in this respect?"

An experienced Coach with psychological or personnel background can work together with the Coachee on developing his behavior, on changing his presentation style or on improving his communication in leadership meetings. But only a **Business Coach** - with deep understanding of the business and industry issues the Coachee has to solve - can quickly and fully grasp the issues the Coachee has to cope with in a given management and decision situation. Apart from the usual coaching role, this opens up new roles such as that of the "trusted advisor" - a role that is becoming more important the higher the Coachee is in ranking. Becoming a "trusted advisor" requires that he wins the full acceptance of the executive, which is not possible without own long-term experience gained in highly ranked leadership positions.

It is important, too, to set the right expectations for the Coachee. A Coach will not provide the "best solution" for the issues of the Coachee. The Coach will, however, sharpen problem awareness, discuss various possible solutions, develop together with the Coachee criteria for making the "right" decisions and support the Coachee in implementing the actions derived from the decisions made. The

Coach guides the process of finding a solution by using proven questioning techniques, which stimulate the Coachee's process of developing a solution himself. And it is exactly this process that leads to sustainable success of coaching compared to other approaches: **Finding the best-fit solution by himself guided by the experienced Business Coach.**

3 What are the key steps of a coaching process?

Some Coaches, especially those with American education, exclusively rely on "their" coaching methodology - independent of the Coachee's individual strengths and weaknesses and independent of the specific issues to be discussed. This "one-size-fits-all-approach" may deliver fast results in about 50% of all cases. But especially when the Coachee is an experienced manager with leadership responsibility the Coach should open his "toolbox" of coaching methods a bit further and carefully select the most suitable method(s) for the coaching sessions. Each coaching should be tailored to the individual needs and requirements of the Coachee in a given situation and, therefore, it is impossible to describe "the" coaching process. However, in more general terms the coaching process usually comprises the following steps:

Step 1: First meeting between Coach and Coachee

An executive should never sign a contract with a (Business) Coach he has not met before - even when the personnel department, colleagues or his boss strongly recommend this specific Coach. In a brief meeting between the Coach and Coachee, both sides should get to know each other and at the end of the meeting, the Coachee should honestly answer the question "does the Coach really understand my business situation and am I prepared to accept the guidance provided by this Coach" with "yes". On the other hand, especially the Business Coach should carefully reflect the questions "do I really have enough expertise and knowhow to support this Coachee in finding the best solution for his issues, will the Coachee accept my guidance and is he prepared to make changes in his business life". Only if both parties are convinced that they will trust each other and that the coaching sessions can deliver tangible results, they should enter into contractual arrangements. Experienced Business Coaches, for instance, typically do not accept 20-30% of all requests they receive mainly due to the impression they get during initial meetings - mostly so because the potential Coachee is not really convinced himself that he does need

Coaching at all (but “all the others”), or because he has only accepted to work with a Coach as this was part of his career development plan or as this was decided by others in the performance reviews.

Step 2: Core principles for and objectives of the Coaching

At the beginning of the coaching process, the Coachee and the Business Coach should agree upon the rules for their joint work and clearly define the objectives the Coachee wants to accomplish. Ideally, they identify ways to measure the coaching success.

In all coaching agreements two important core principles – among others - should be included, namely **“to act on a voluntary basis only”** and strict **“confidentiality”**. It is important that the Coachee truly owns the coaching process and, therefore, he should have the possibility to end the Coaching at any time regardless of prior agreements. Coaching should never become an obligation, but should always feel like a voluntary activity to get new insights and to develop creative and innovative solutions.

The second rule, “confidentiality”, is even more important: there should be a clear understanding that the Coach keeps everything that has been discussed or that has been observed strictly confidential. Even the name of the Coachee should not be disclosed or even used as a reference. The only exception being the Coachee agreeing explicitly to any form of disclosure.

In the first session, the task is to precisely define and agree upon the objectives of the Coaching. The better the objectives are described the better the Coach can select the adequate methods and select the process that will lead to the desired results. However, the objectives should be reviewed on a milestone-basis during the coaching process as the focus of the Coaching may shift over time due to better insights, other business situations than those discussed at the beginning of the Coaching get higher priority or the Coachee’s management tasks have changed.

In addition, a detailed schedule for the upcoming coaching sessions including the main topics of each session should be developed.

Step 3: The coaching sessions itself

Typically, the coaching process aiming for behavioral changes consists of about 20 coaching hours in total, divided into 10 sessions with 2 hours each. At the beginning, the frequency of the sessions is quite high (e.g. one session per week), but there should always be enough time between two ses-

sions to enable the Coachee to reflect the envisaged changes, to try out new approaches, and to experience the results of his/her new behavior. Then – after 4 to 6 sessions – the frequency should be reduced, e.g. to one session every two, three or four weeks. In total, the entire coaching process should thus be finished in less than six months. Experience shows, however, that it makes a lot of sense to plan for a brief review session after 12 and 24 months to evaluate the progress made and to give feedback to the Coachee once more.

Coaching is not a theoretical exercise; starting point should always be a real business situation the Coachee is confronted with. The Coachee should describe these situations in detail with special focus on how he and all other participants acted/reacted, how he would assess his behavior and how would the others potentially assess his performance from their perspectives. Quite often, a significant discrepancy between the self-assessment of the Coachee and the impression the Coachee made on others can be identified at this early stage. In agreement with the Coachee it is, therefore, very helpful to get direct feedback from the next higher management level or his colleagues. Coach and Coachee may even decide that it is useful that the Coach may join (team) meetings to observe behavior and reactions real-time.

For instance, in the third example (C) described above, the Coachee showed two significantly different behaviors: in the management meetings under the leadership of his boss, he demonstrated from the very beginning of the meetings that he is not in-line with the more top-down-style of his boss (the Coachee used the word “dictatorial” style). With all his gestures and his facial expressions he gave the clear signal that he does not accept the way his boss is organizing and leading the meetings. His entire attitude was negative and he permanently criticized both his boss and his colleagues or worked on his computer not paying any attention to the contributions of all others. However, when it was his turn to report about the progress made in the chemical unit he was in charge of, his behavior was impeccable. In meetings with his own team-leaders, the Coachee turned out to be “a different person” – he was alert and polite, accepted different opinions, and was results-oriented. Not one of “his” meetings finished without an action plan with clear responsibilities and a precise timing.

As the Coachee was not aware of this discrepant behavior, a whole session was videotaped. At the beginning of the meeting, the Coachee was very positive and provided valuable contributions, but then he forgot about the camera and both his body language and his comments generated an unrec-

essary and growing tension the longer the meeting lasted. After watching the video and pinpointing key scenes, the Coachee understood his negative impact on the meeting and how easy it was for all the others “to realize that he tries to make life for his boss difficult”. In the following sessions with the Coachee, the work clearly focused on uncovering the trigger points for his behavior and, more important, how to actively overcome it.

Experienced Business Coaches use various techniques/elements of systemic Coaching and modern technologies to make Coachees aware of their behavior and the signals they send out. If necessary, it is common practice to accompany the Coachee an entire day to experience first-hand how he organizes and handles his working day. This “shadowing”-approach provides valuable insights as it is especially the interaction with other managers, colleagues or team members that provides examples for successful behavior, hindering actions, missed opportunities – all in all valuable food for thought for the Coachee, truly illustrating examples from daily life rather than theoretical exercises.

This is especially the case the higher the executive is in ranking. In theory, people are well aware of what constitutes desired and adequate behavior. Readings, past trainings or feedback from others have all left their mark. Long-time experience and success leading to top positions added to that behavior and especially top executives quite often wrongly assume everything is fine. It is the more reflected of them who are purposefully looking for Business Coaching to offer new insights, a new perspective and – most of all – an independent view. They are looking for someone who has no stakes to discuss openly areas of weakness, of question marks, and uncertainty. Deep business and industry knowledge and understanding of management processes are extremely helpful in these sessions when underpinned with profound Coaching methods to provide guidance and meet high expectations.

In the case of the above described middle-management R&D-manager (A), the Business Coaching started to support him in identifying the critical success factors of the business, evaluating in detail the customer requirements of today and tomorrow, analyzing the competitors and expected competitive moves, getting a better understanding about the key regional and global markets, assessing and organizing the own resources and finally finding ways how to motivate his teams. This program took six months in total with two-hours-sessions every second week plus “home-work” for the time between sessions.

The tasks for the line-manager who was sup-

posed to take over the leadership of the strategy department for the next two years (B), were different: this chemical company had a well-established strategy process and every five years the company hired one of the leading global consulting firms to review and adapt the company’s strategy to meet the current and future market trends and requirements. In the past, the manager was already heavily involved in the strategy process by providing input and delivering the required data for the unit he was responsible for. Therefore, the task of the Business Coach focused on discussing with the Coachee the strategic toolbox, reviewing the strategy documents of the last five years, identifying strategic deficits and potential data sources. The objective of the executive clearly was to bring the strategy department to the next level (world-class level). The biggest obstacle he had, however, was not a lack of understanding of the strategy methodologies or insufficient knowledge of the chemical markets, but the way he was “thinking”. As a line-manager he was used to think very operational, mainly bottom-up. Now he was required to think “out-of-the-box”, mainly top-down. After six intensive sessions with him in less than 1.5 months, the entire management felt him to be a much better fit in his new role.

A final example where Business Coaching can be an effective tool was a young woman who for the first time took over a management responsibility. Here, the Coaching was two-fold: supporting her in terms of developing the required leadership skills and behavior as part of her new role. And, at the same time, the newly appointed manager was expected to bring about a major change in her department. Accomplishing both was a tough task. Proper guidance, great support by the entire management team and her ability to quickly pick up on learnings and insights already led to top results after six months. Today, 24 months later, the Coachee’s department is being viewed as extremely well-led, having managed the desired turn-around and the manager herself is again on the list for promotion within the next two years.

Step 4: Ending the coaching process

In the last session, Coachee and Coach should critically reflect whether all objectives have been fulfilled and the Coachee’s expectations have been fully met. If follow-up sessions are viewed as being helpful, they should be agreed upon now (in form of meetings or telephone calls). In addition, most Coachees find it extremely helpful, if a Coach offers a “hot-line”, the Coachee can call, whenever there is an “urgent” issue coming-up.

4 Summary and “what will happen in the future”

More and more companies in the chemical industry (and in all other industries) work together with Coaches and Business Coaches. Some companies make it even mandatory that a “high potential” gets a Coach as part of both his personality and business development program. Other companies systematically use Business Coaches to accompany an executive, for instance, for the first 100 days after he has taken over a new role/responsibility. And even entire boards hire Business Coaches to provide independent guidance for the company’s way to the future. And this trend will continue. Consequently, the demand for excellent Business Coaches will increase and may even generate a bottleneck.

Currently, companies in other industries – especially those in less product- and more service-oriented sectors (for instance, insurance, telecom etc.) - have already established “their pool” of certified Coaches and Business Coaches of significant size. These companies have installed a rigid evaluation process to become a preferred partner in this coaching pool, too, and review the performance of the Coaches in the pool at least twice a year.

Clearly, the concept “Coaching” is recognized as an effective tool especially for managers because of its voluntary and highly individualized set-up. Key for success is the selection of the “right” Coach. As in consulting, the wide field of so-called Coaches will sort itself out based on true professional background and certified knowledge. Properly sourced and adequately utilized for the different management levels, Coaching is in terms of the cost-benefit relationship preferable compared to standard trainings.

Practitioner's Section

Size does matter in chemical distribution

Wolfgang Falter*

* AlixPartners GmbH, Hofgarten Palais, Bleichstraße 8-10, D-40211 Düsseldorf, wfalter@alixpartners.com

This article provides an overview on the current and likely future situation of chemical distribution in Europe. Chemical distribution markets in Europe are described and put into global perspective. Chemical distribution is compared to other distribution channels (direct sales, agents, traders, resellers) and reasons for the above average growth rates of chemical distribution are given. In addition, underlying root causes for the recent consolidation trends in chemical distribution are analyzed. As the article forecasts that size matters, further consolidation can be expected in this sector in the near future. Different characteristics and key success factors for distributing either standard molecules/bulk industrial chemicals or providing specialty solution chemicals are discussed. For the former local asset effectiveness is identified as a major consolidation driver, whereby for the latter three growth and profitability drivers are postulated.

1 European chemical distribution markets in global perspective

1.1 Introduction to chemical distribution

More than 85% of global chemicals are sold directly by the producers. Less than 15% are sold indirectly, either through agents, traders or chemical distributors.

Agents typically receive a pre-agreed commission from the producer and price the chemicals according to the producer's instructions. Agents do not take title of the chemicals and they are very often small "one-man-bands". Their success factor is the knowledge of a seller and potential buyer of certain chemicals and bringing them together.

Traders are typically active upstream in the value chain, trading commodity products in large "parcels", which are often moved by vessel or barge. They take title and buy on own account or on behalf of a customer. Most frequently, traders buy "back-to-back" and do not have any stock. Their knowledge of supply markets, their arbitrage, pricing and global logistics skills are the major differentiators. In the end, traders follow an "opportunistic" business model, in which the availability and price of chemicals determine, if they are successful or not.

Chemical distributors typically buy, store, sell and ship chemicals. They show activities further downstream, take title of the chemicals and offer a wide product mix, ranging from bulk commo-

ty chemicals via plastic and rubber materials to packed specialty chemicals, which often require specific application know-how. They often bundle products in their warehouses and offer additional services over and beyond the logistical supply chain and commercial sales functions. Those services can range from mixing, blending, packaging, drumming, labeling via just-in-time delivery, financing, waste handling, regulatory, environmental, health, safety and laboratory services to recycling and consulting. Chemical distributors establish resale prices that ensure healthy, integrated margins. Sometimes, chemical distributors also act as traders or even as agents. For those parts of their business, only trader margins and commissions, but not revenues, have been considered in the following business and overall market numbers.

The following views and findings regarding the role, growth, most important actors and consolidation trends of chemical distribution in Europe result from consulting chemical distributors and their principals, interviews and discussions with many managers involved in the distribution of chemicals, and the participation in the European Association of Chemical Distributors (FECC) conferences.

Figure 1 Requirements of producers/principals vis-à-vis chemical distributors (Source: AlixPartners).

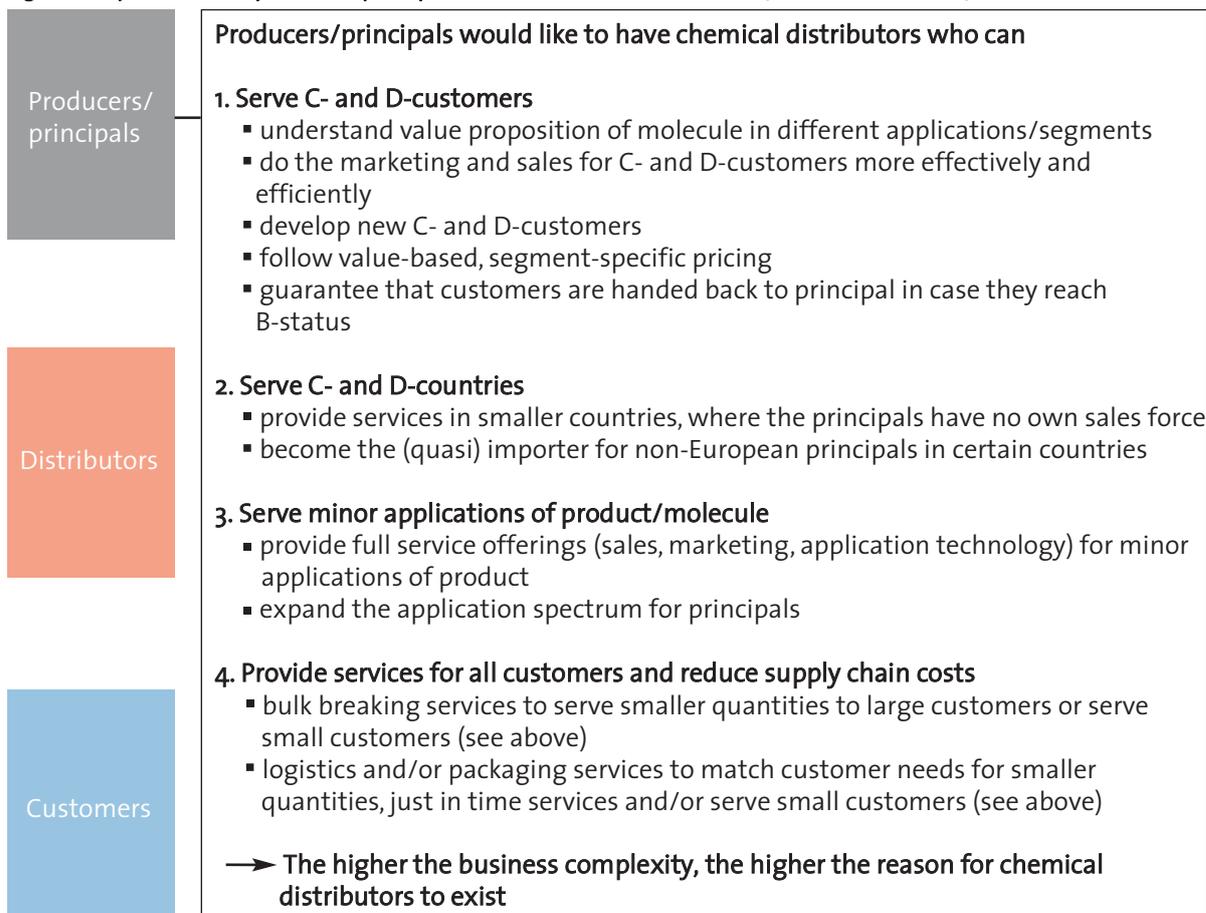
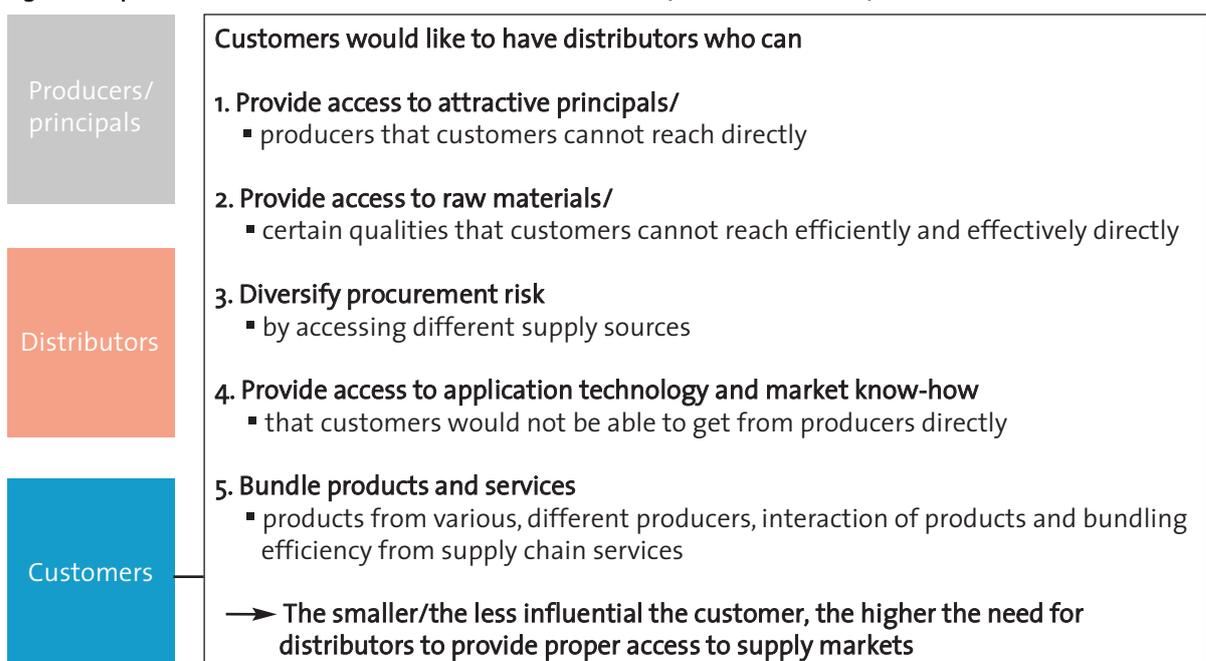


Figure 2 Requirements of customers vis-à-vis chemical distributors (Source: AlixPartners).



1.2 Role and value proposition of chemical distributors in between principals and customers

When looking at the motivations in order to increase sales via chemical distribution, particularly in specialty solution chemicals, principals/producers, customers and chemical distributors themselves exhibit differences.

From a principal perspective (Figure 1), it is about serving C- and D-customers as well as -countries, applications and providing service to all customers at reduced supply chain and commercial costs.

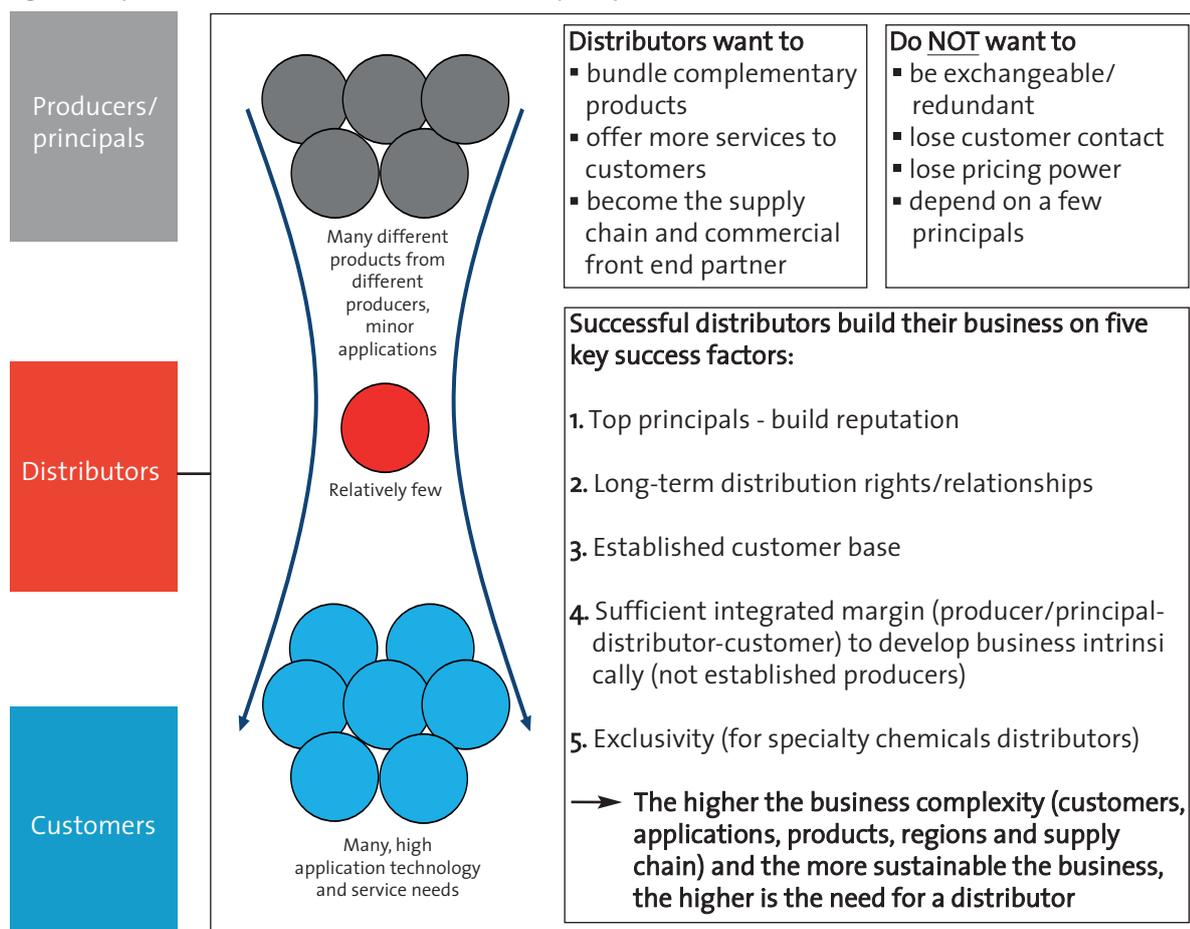
From a customer perspective (Figure 2), having access to top principals through qualified chemical distributors, who can additionally complement the product, application and service portfolio is crucial.

For the chemical distributors themselves (Figure 3), it is important to sustain their business and expand their value added between producers and customers. They aim to build long-term, exclusive relationships and distribution rights with top prin-

cipals and build reputation by serving them well. They establish a customer base, which they actively care about. They aim to have an integrated margin that allows them to grow and develop the business intrinsically.

The attractiveness of the product-application-regional segment might be different for a distributor than for a producer/principal. If there are only a few chemical distributors but many customers and different principals/producers in a given market segment, this would be a context that is more favorable for a chemical distributor. The more of these “hourglass”-like market characteristics, i.e. many different products from different producers, many minor applications, few chemical distributors and many fragmented customers with high technical solution and other service needs, exist, the more attractive the market segment appears to be for chemical distributors. In these kinds of market segments, distributors typically grow more than 5% per annum and generate more than 10% profitability (EBITDA/net revenues).

Figure 3 Requirements of chemical distributors vis-à-vis principals and customers (Source: AlixPartners).



1.3 Size and structure of the European chemical distribution markets

It is difficult to define the size and structure of the European chemical distribution markets due to the fact that the borders between agents, traders and chemical distributors are not very well defined and due to the fact that many chemical distributors are small, family-owned, private companies which do not publish their performance and results. Therefore, only estimates are given in the following, based on experience gained in the sector.

There are more than 2,000 chemical distributors active in Europe (incl. Eastern Europe, Russia and Turkey) that have generated revenues of approximately EUR 47.5 billion in 2014.

This is estimated to be more than 25% of the global chemical distribution market accounting for about EUR 185 billion. 20% of the global chemical distribution is located in China, followed by NAFTA (19%), Western Europe (18%), Latin America (10%) and Eastern Europe (7%). The European chemical distribution market of EUR 47.5 billion corresponds to 5-6% of the European consumption of chemicals and a chemical production value of approximately EUR 39.5 billion. The difference of EUR 8 billion results from the 17% margin the chemical distributors obtain. From those 17%, distributors have to cover transportation costs (3%), warehousing, refilling, bulk breaking and formulation costs (5%), SG&A (2%) and regulatory (REACH, HSE, Respon-

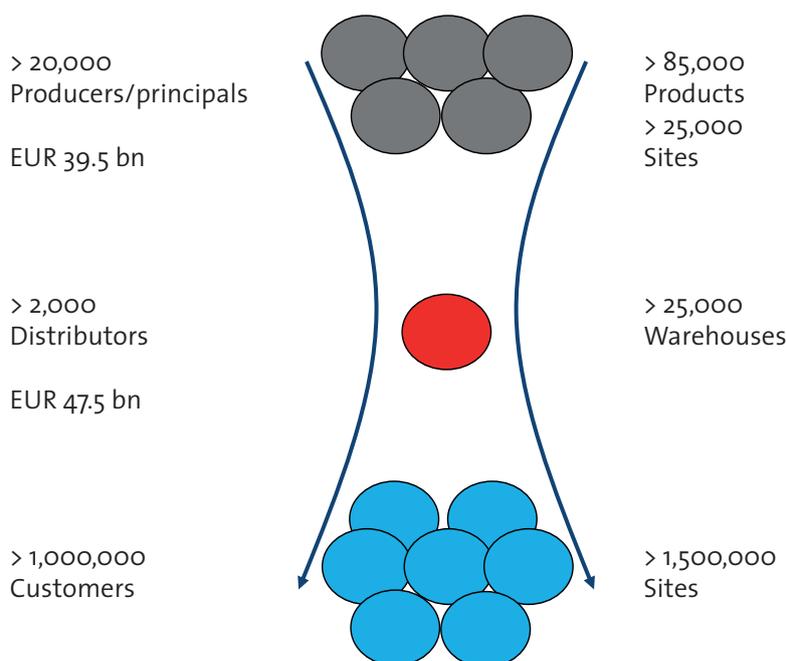
sible Care, etc.) (1%) costs, resulting in 6% EBITDA profitability on average. Those numbers represent mean values. They differ significantly from commodity bulk to specialty packed chemicals and depend on the asset footprint, market-competitive position and entrepreneurial drive of the respective chemical distributor. All other things equal, profits tend to be higher in the North and West of Europe and lower in the South and East.

Unlike in Asian and emerging markets, chemical distribution is well established in Europe. More than 85,000 chemical products, which are produced in more than 25,000 European and non-European sites, are delivered via chemical distributors through more than 25,000 warehouses to more than a million customers and more than 1.5 million customer sites (see Figure 4). Thus, chemical distribution is largely about handling the supply chain complexity between chemical producers and chemical users. The core role of the distributor in the value chain is to help making the supply chain between producers and customers more effective and efficient - "connecting chemistry" as the clear market leader Brenntag defines it.

1.4 Role of chemical distribution vis-à-vis its suppliers and customers and its impact on consolidation trends

Will this role of chemical distributors change in the future? Will suppliers or customers consolidate

Figure 4 Schematic structure of chemical distribution in Europe (estimated numbers).



and in turn drive consolidation of chemical distributors?

On the supply side, chemical producers and sites in Europe consolidate and at the same time, more and more non-European producers are offering their chemicals to the European market out of non-European assets. Fine and specialty chemicals are increasingly produced in China and bulk commodities and petrochemicals in the Middle East and United States, so that the fragmentation of the chemicals industry overall remains the same and does not increase. This is very different from automotive, airlines, food, packaging, steel and many other sectors. The global market share of BASF, Dow, Sabic, Sinopec, etc. remains constant. BASF is still capturing less than 4% global market share. For every consolidation move in Europe or North America, new players are popping up in other regions of the world.

However, there is an increasing consolidation trend on a product segment level. The top 5 suppliers in selected segments control more than 75% of the global markets. This is true for many product groups, ranging from industrial gases over amines, polyolefins, adhesives to textile and leather chemicals. Formerly integrated national champions are changing to become global segment leaders. For chemical distributors that might short-term and individually be a disadvantage as they may lose distribution rights. From a long-term perspective and in structural terms, it is a benefit as the role of a chemical distributor to complement products from different segments into application increases. As mentioned above, suppliers are more spread around the globe and for consolidating suppliers in Europe, the US or Japan, there are new suppliers emerging in China and other countries. All of this makes the procurement and supply chain function of chemical distributors more important.

On the customer side, there are typically large lead customers, who consolidate and take more market shares. In segments such as “coatings”, for instance, PPG and Akzo become global players and in “food”, Kraft and Nestlé are pursuing global leadership positions, taking market shares through acquisitions. In spite of this consolidation at the top of the customer segments, the overall fragmentation in the coatings and food industry remains the same. There are still more than 3,500 coatings and 275,000 food companies in Europe, which need to be served with coatings and food ingredients. This can not only be observed in coatings and food, but also in adhesives, plastics, rubbers as well as in construction, fine and care chemicals and many other relevant application areas. So in spite of the consolidation of customers at the top, small and medium-sized customers do sustain and in many

areas, new, small customers appear.

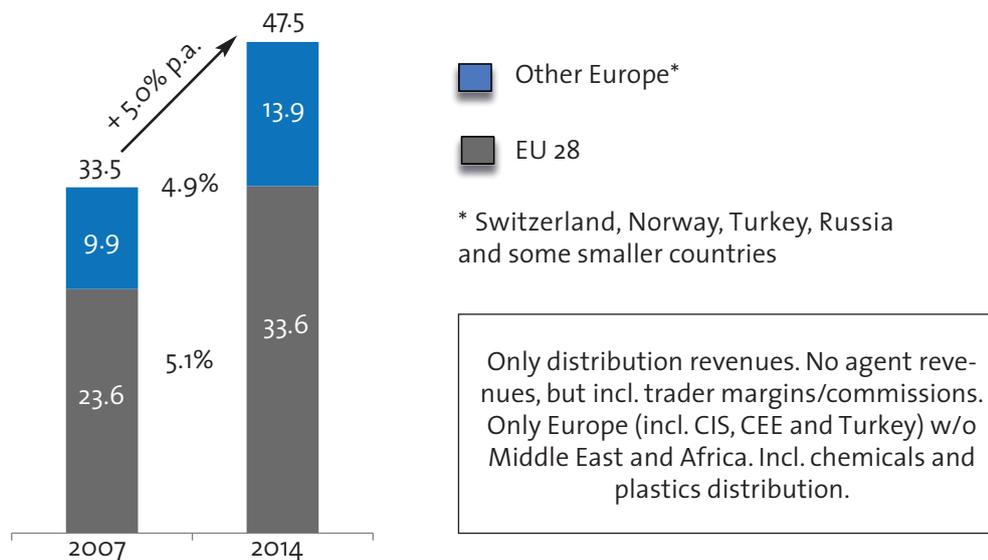
So both - from a supplier and customer perspective - there is no clear reason, why chemical distribution should or needs to further consolidate. Principal and customer trends are thus not a driver of further consolidation in chemicals distribution. Still, there is potentially a threat for medium-sized chemical distributors with revenues ranging from EUR 40 to 400 million per annum. They are the target companies for large distributors who continue to further consolidate. Smaller distributors are probably safer, if they have a specific competence in a country/region and/or a niche application. Additionally, new formats emerge such as new, local unconventional resellers who buy standard chemicals and formulate locally to fulfill customer needs better and quicker; or carve outs, whereby chemical distributors either support or are confronted with individuals taking over the supplier and customer relationship to start their own, small distribution business. In spite of the already high fragmentation of the chemical distribution industry, there are new entrepreneurs starting new chemical distribution businesses in Europe, especially in specialty chemicals distribution, where the entry barriers (capital expenditures) are lower than in bulk commodity distribution. Therefore, the disappearance of mid-sized chemical distributors, which are on the “hunting list” of large companies, is probably offset by the emergence of new start-up businesses.

1.5 Growth rates of European chemical distribution

Over the past seven years, chemical distribution in Europe has grown about 5% per annum, in spite of the economic downturn in 2009 (see Figure 5). This growth of European chemical distribution is 1.5%- points higher than the underlying consumption of chemicals in Europe. Thus, there must be additional reasons next to the structural developments at the supplier and customer markets driving growth over and above the average growth rates of chemical consumption.

When looking at the regional market structure, the role of chemical distribution as an indirect sales channel appears to be stronger in countries with a relatively weaker chemical industry and vice versa. However, in absolute numbers, chemical distribution reflects the importance of the chemical industry in the respective country. Thus, EUR 10.5 billion (22%) of European chemical distribution are situated in Germany. If Italy, Benelux and the United Kingdom with Ireland are added, 53% of the market (EUR 25.3 billion) are covered by those countries. Turkey and Eastern Europe – in spite of the

Figure 5 Size and growth of chemical distribution in Europe 2007-2014 [EUR billion (CAGR in %)] (Sources: CEFIC, VCI, BASF, BCG, ChemAgility, DistriConsult, FECC, AlixPartners).



current tensions and issues – remain the strongest growth areas in Europe, which will most likely account for already 20% of the European chemical distribution market this year.

1.6 Players and consolidation trends in European chemical distribution

The top 10 chemical distributors cover approximately EUR 13 billion (27%) of the European market (Figure 6). Brenntag is by far the market leader and more than double the size of the second largest actor Univar (Figure 7), at least in Europe. IMCD and Omya with their stronger specialty and solution provider portfolio have been outgrowing the market over the past years.

There are approximately 90 mid-sized chemical distributors with revenues of EUR 40-400 million (on average EUR 170 million), which account for about one third of European chemical distribution sales followed by a very large number (more than 1,900) of small and very small distributors.

As the growth rates of agents and traders have been more in line with the growth rates of chemical consumption in Europe, this means, that an increasing share of chemicals is marketed no longer directly, but indirectly via distributors.

This is less the case when referring to bulk commodity chemicals, but very strongly in specialty chemicals solutions. Especially European countries with a low and/or declining chemicals production (e.g. Greece, UK, CEE/ CIS) offer best intrinsic growth

opportunities for chemical distributors. This effect is particularly strong in challenged markets and applications (e.g. leather, textile, paper, rubber chemicals), i.e. markets, where the production base in Europe is increasingly uncompetitive, where commoditization is stronger than innovation and traditional players in those markets lose market shares against backward integrated and/or emerging market competitors. Within those regions and applications, chemical distributors are able to capture over-proportionately market shares against traditional principals.

For the principals, it becomes less and less attractive to maintain a full presence with own warehouses, commercial and technical sales force, formulation and other services. Unlike their principals, chemical distributors can complement and leverage their offerings and can thus offer more cost competitive commercial and supply chain services. This is a major reason, why on average chemical distributors are able to increase their European business more than the underlying principals/producers and the overall growth of chemical consumption.

2 Fundamental differences in distributing standard molecules and providing solutions

The distribution of standard molecules or bulk industrial chemicals has very different characteristics and key success factors compared to provid-

Figure 6 Structure of the chemical distribution market in Europe by company size (schematic, estimated numbers) (Sources: CEFIC, VCI, BASF, BCG, ChemAgility, FECC, AlixPartners).

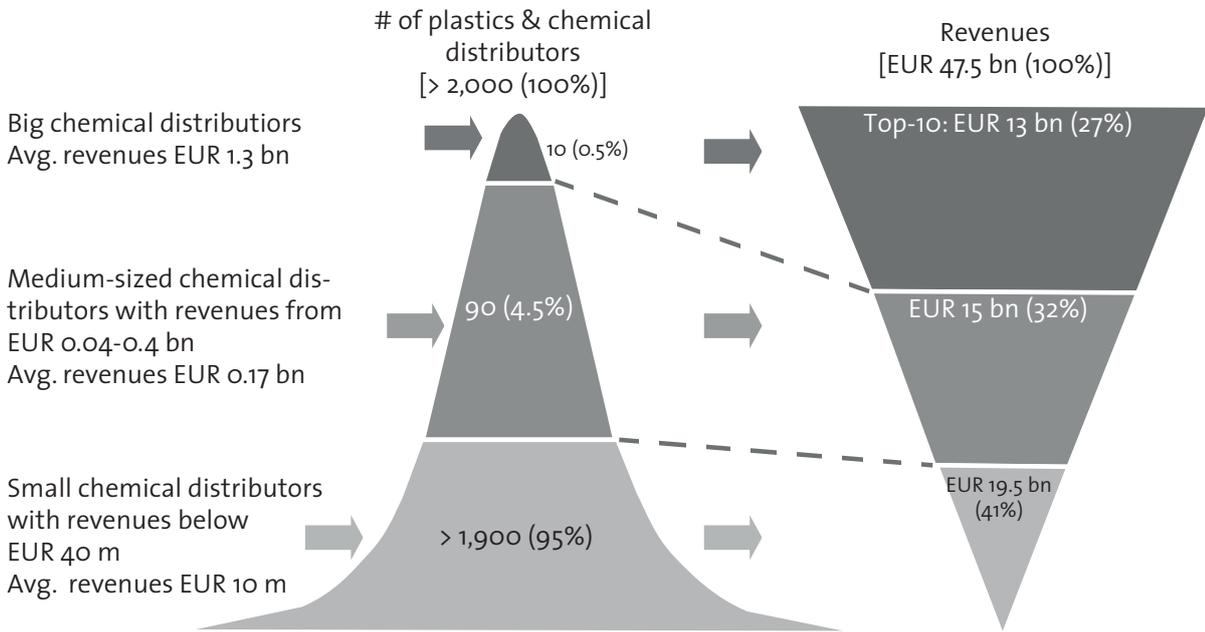
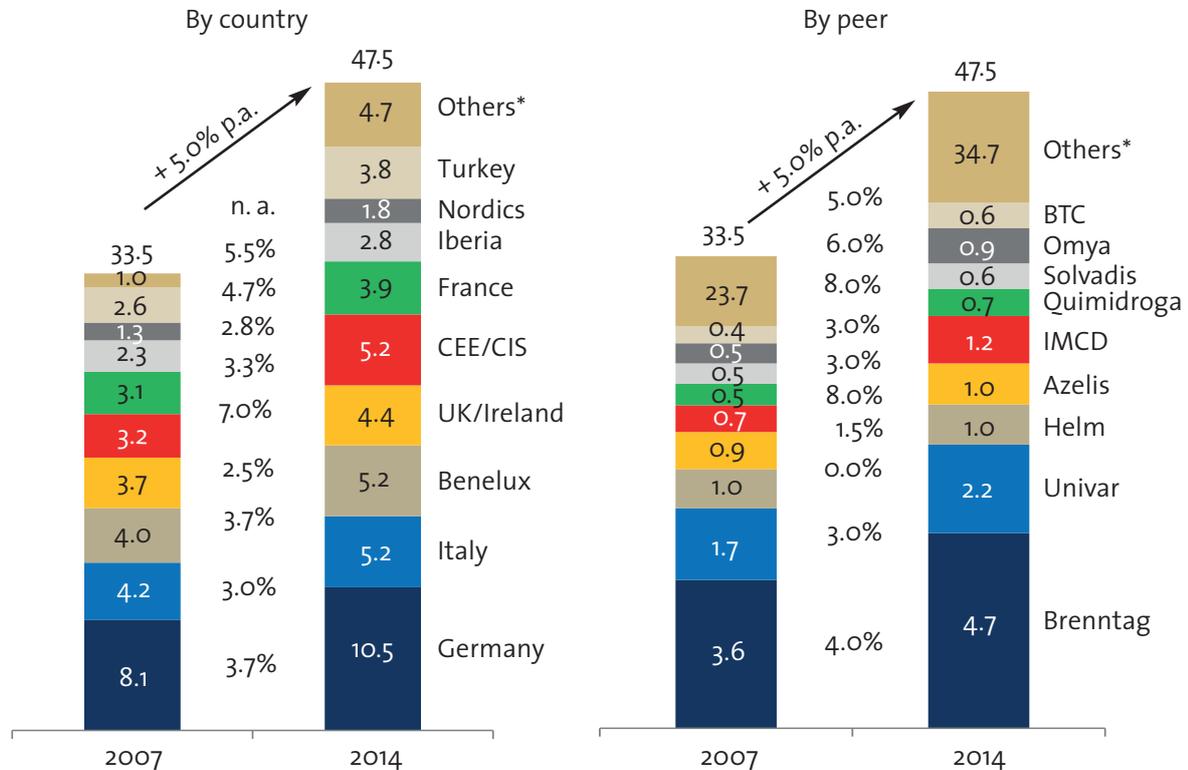


Figure 7 The chemical distribution market and growth rates in Europe by country and peers [EUR billion (CAGR in %)] (schematic, estimated numbers) (Sources: CEFIC, VCI, BASF, BCG, ChemAgility, DistriConsult, FECC, AlixPartners).



ing specialty chemical solutions (see Figure 8).

2.1 Standard molecules or bulk industrial chemicals

Bulk industrial chemicals are often standardized chemical grades, which are sourced non-exclusively by the chemical distributor. Sourcing and selling are mostly separated. Thereby, customer relationships are more important than supplier relationship. Bulk chemicals are unpacked or distributor packed and are often hazardous and liquid, requiring capital-intensive investments into tank farms and fleets. Supply chain costs are high in relation to product price and regional presence is a must. Regional/local competition is about unit price, volume, scale and minimizing handling costs. A differentiator is often a high responsiveness to deliver the right product in full on time. Business is thus more transactional and short-term oriented. As the bulk industrial chemicals distribution business shows growth below average and as maintenance as well as the need to offer an effective supply chain increase, a local/regional consolidation in the markets towards the more efficient bulk supply chain peers can be recognized.

2.2 Packed, tailor-made specialty solution chemicals

Packed, tailor made specialty solution chemi-

als are products that are branded by the principal and typically sourced exclusively by the chemical distributor. Exclusivity applies to both sides: The principal may not sell his products in the applications and countries agreed upon to another chemical distributor and the distributor may not source this product type from any other source. Specialty solution chemicals are mostly factory-packed performance products requiring a good understanding of the value-in-use for the respective applications.

Thus, the supplier relationships appear to be more important than the relationship to customers. Unlike with bulk chemicals, sourcing and selling are often performed by the same product manager. Warehousing and logistics are often not a key success factor of the chemical distributor and therefore outsourced to third party logistics providers. Good relationships or projects with principals as well as the product portfolio, application services and market coverage are often competitive differentiators.

Due to the tendency of principals to outsource the commercial and supply chain functions in many specialty applications to partners, the packed specialty chemicals segment grows above average. With relatively low capital entry barriers, there is a lot of competition and more and more chemical distributors try to participate in these growing markets.

The allocation of chemicals either in the group

Figure 8 Differences between bulk industrial and specialty solution chemicals distribution.

Chemical distributor characteristics	
Bulk industrial chemicals → Short-term transactions/businesses	Specialty solution chemicals → Long-term projects/relationships
Service orientation	Industry/application orientation
Capital intensive	Manpower intensive
Service creates value and differentiation	Products create value and differentiation
High customer orientation	High producer/principal orientation
Generic molecules	Branded products
Raw materials, hazardous, flammable bulk chemicals	Performance products
Distributor packed materials	Factory packed materials
Volume creates revenue and profit	Unit price creates revenue and profit
Reduced number of distributors	High number of distributors
High entry barriers	Medium entry barriers
High logistic costs in relation to price	Low logistic costs in relation to price
Regional presence	European or national industry/market coverage
Non exclusive producer relationships	Exclusive producer/principal relationships

of bulk industrial or specialty solution chemicals is not always obvious. For instance, standard polymers and rubbers rather follow bulk industrial chemicals, while high performance elastomers rather exhibit specialty chemicals characteristics. Within those general product groups, there are often more specific subgroups which might belong to one or the other category. This is more than a theoretical exercise to segment chemical distribution markets.

There are about a dozen of local bulk industrial chemical distributors in the major countries or regions controlling the market, such as ECEM, Helm, Julius Hoesch, Quimasso, Solvadis, and Tillmann. There are even less plastics and rubber distributors like Albis, Lautrup, Nexeo Solutions, Resinex, and A.Schulmann.

Due to low entry barriers, there are hundreds of specialty solution chemical distributors who increasingly focus on various application areas and multiple regions and countries. Typical examples are: Azelis, Barentz, BTC (BASF), DKSH, Eigenmann & Veronelli, Grolman, HSH group, IMCD, Krahn, Lanxess Distribution, Nordmann Rassmann, Omya, Pluschem EEIG, A.E.Tiefenbacher and Unipex.

Furthermore, the different characteristics of bulk industrial and packed specialty chemicals have also led larger chemical distributors which offer both services to organizationally separate those

activities, in spite of some cross-selling opportunities.

Consequently, one should think about the European chemical distribution market as (combining) three markets: 1. Bulk industrial chemicals, 2. specialty solution chemicals and 3. plastics and rubbers.

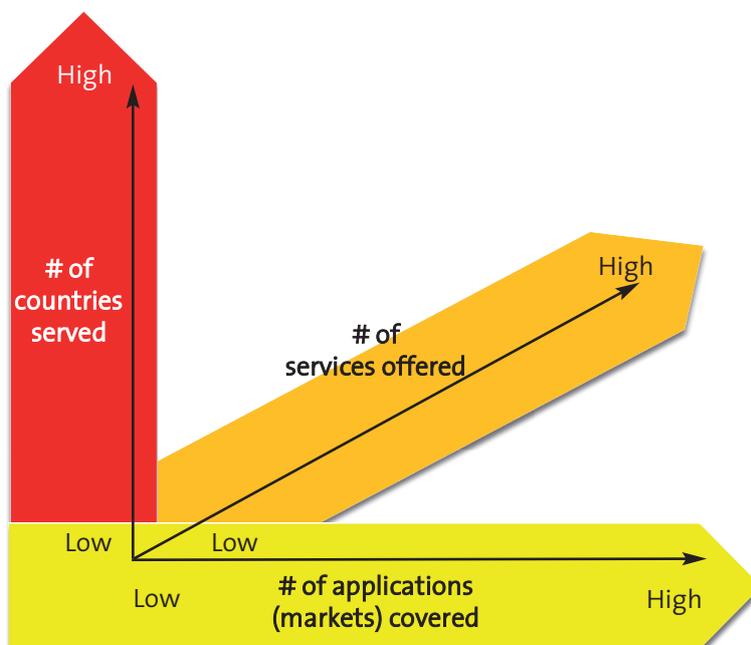
3 Drivers for size and consolidation

3.1 In specialty solution chemicals

Keeping the general trends for solution providers in chemical distribution in mind, there are three drivers that ask for more size and consolidation (Figure 9). Those drivers are primarily influenced by producers/principals and chemical distributors. In the case of driver C, the demand for value adding services, customers play a role as well. The three drivers that ask for more critical mass and scale are:

- A. Serving more applications/market segment
- B. Serving more countries/regions
- C. Offering more value adding services.

Figure 9 Trends in specialty solution chemicals distribution (schematic) (Source: AlixPartners).



A. Serving more applications/market segment

Principals increasingly want their preferred chemical distributors to understand the different application (market) needs of their differentiated (branded, formulated, or otherwise specified) chemicals and to serve those application segments (markets) differently to meet their specific needs.

Chemical distributors increasingly see the opportunity to service application (market) segments with similar service needs more effectively and efficiently than many principals by bundling complementary product groups and offering sampling, development, application and formulation services locally. This works specifically well in areas where unconventional resellers or other non-traditional market players try to capture market shares from principals/producers who can neither compete regarding cost nor regarding service any more.

From the perspective of a principal, but even more from the one of a chemical distributor, there is an increasing trend to be present in multiple applications (markets) to bundle competencies/skills and capture market synergies.

B. Serving more countries/regions

Principals are frequently asking for fewer distributors covering multiple countries in order to streamline and professionalize their distributor portfolio. Thus, principals are increasingly removing their commercial presence from C- and D-countries, asking chemical distributors to become their supply chain and commercial front end in those countries, so that they are increasingly capturing cross-border supply chain and commercial synergies. The LEL-network is an attempt of several mid-sized chemical distributors to act cross-border without changing the independent company status of members, similar to Star Alliance for airlines.

Both from a principal as well as chemical distributor perspective, there is a growing trend to be present in multiple countries – ideally all over Europe, but only in specialty chemicals and specialty plastics and rubber distribution.

C. Offering more value adding services

Principals increasingly view chemical distributors not as “indirect customers”, but as valuable “supply chain and commercial partners”. They want their distributors to become their partner in supply chain and warehousing excellence, including solicit-order-to-cash processes (e.g. in South-Eastern Europe), local formulation, application technology and technical service as well as new product introducer, product development and application

partner.

Customers are asking for financing, vendor managed inventory, packaging handling/recycling and regulatory services. Chemical distributors increasingly see the opportunity to capture more value added services and thus secure their position in the relevant markets as well as in the value chain in order to be less easily substituted and more profitable.

From a principal but even more so from a chemical distributor perspective, there is an increasing tendency to offer more services in order to capture market opportunities, mitigate risks, differentiate and grow against peers and become more sustainable and profitable.

From the minimum size to the level of offering services, there is a threshold, especially in specialty and solution chemicals distribution of approximately EUR 80-100 million in revenues, to fulfill all of the criteria mentioned above. Many players are beyond this minimum. It is thus likely that in parallel to the (former) basis of the large top 10 chemical distributors, there will be a similar trend in the “second league” of specialty distributors. This additional class of chemical distributors is necessary and will be sustainable. The few large players cannot cover the needs of multiple exclusive suppliers and are often already too big to serve very small customers or capture the needs of niche markets.

3.2 In bulk industrial chemicals, plastics and rubbers

In bulk and commodity chemicals, there will be further consolidation as well, but for different reasons. Standardized chemicals from multiple suppliers have an increasing price transparency. Even smaller customers are able to check prices online in real time. Thus, the availability of bulk chemicals, plastics and rubbers, lead times and supply chain/transportation costs are becoming more important decision-making criteria.

In consequence, the chemical distributor who has the most effective and efficient tank farm or warehouse with an efficient 24-7-transportation service will gradually outperform its local and regional peers. As bulk handling is capital-intensive, financially stronger peers and those who have re-invested regularly into the integrity of their assets will most probably emerge as front runners to become the local champions in their respective markets. Often, weaker distributors start using the more efficient asset structure of the leader as well, but ultimately they hand over the business and customers to the more effective and efficient com-

petitor.

There are tendencies of local champions to form alliances (e.g. Penta) in order to overcome scale disadvantages, especially in purchasing and cross-border marketing and sales. This can help to reduce the performance gap between smaller and larger chemical distributors, but it is probably only the second best solution as the general reasons to invest into scale, in order to cover fixed costs for REACH/ regulatory/ safety/ sustainability, invest into new services, and to attract and retain talent, are company-specific and difficult to share with competitors. Those company-specific reasons for growing in size are the same in bulk chemicals as well as in specialty chemicals and increasingly require a minimum size even for local champions or niche players.

4 Summary: Size does matter in chemical distribution - for different reasons in specialties and commodities

In summary, there is a strong logic in chemical distribution why size matters and this will ultimately lead to further consolidation, creating a group of second tier chemical distributors, which have a minimum size and are:

- customer-oriented, local bulk chemical distributors and
- supplier-oriented, pan-European specialty solution chemicals distributors.

The large players are increasingly hindered to grow further due to supplier conflicts in specialty solution chemicals. Supplier conflicts arise when a chemical distributor wants to acquire a competitor although this competitor has exclusive distribution rights for a product group and territory which the acquiring distributor has with another principal. In bulk industrial commodity chemicals, acquisitions are sometimes prevented by cartel authorities in order to avoid high local market shares of one chemical distributor.

Thus, a group of sustainable mid-sized players who either focus on certain regions or adjacent applications/markets will become stronger and form a second tier in chemical distribution markets. They will probably be slightly less profitable than the top 10 players, but their performance and attitude (nimble, flexible, fast) towards suppliers and customers will be well in line with expectations to make them stand out and prosper sustainably.

References

- Baker, J. (2015): Seeking a wider Footprint, Presentation at the 51st FECC Annual Congress, Athens, Greece, 6-8 May, 2015.
- BCG (2014): Specialty Chemical distribution - Market Update.
- BCG (2013): The Growing Opportunity for Chemical distribution.
- Eberhard, G. (2015): M&A in Chemical distribution, *ICIS Chemical Business*, March 2015.
- Eberhard, G. (2015): Will the future bring growth and sustainability?, *Distribution & Logistics*, **3**, May 2015.
- FECC Supplement (2014): M&A will the pace continue?, *ICIS Chemical Business*, May 2014.
- ICIS Chemical Business (2014): ICIS Top 100 Chemical Distributors.
- Jensen-Korte, U. (2015): Towards a sustainable future, *Distribution & Logistics*, **3**, May 2015.
- Prior, N. (2015): Caught in the middle, *Distribution & Logistics*, **3**, May 2015.
- Note: The market model is based on discussions with owners of ChemAgility and DistriConsult, regular attendance of FECC, VCI and CEFIC events and interviews with many managers of chemical distributors over the past years.
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