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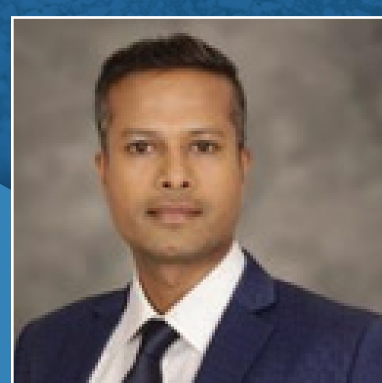
TRANSFORMATIONAL GROWTH LEADERSHIP

A CEO Perspective

Building on Lactose Leadership

DFE Pharma's Evolution into an Excipient Innovation Platform



Unmesh Lal

Vice President,

Frost & Sullivan

in conversation with

Dr. Sven Abend,

CEO,

DFE Pharma

As pharmaceutical manufacturers navigate increasingly complex formulation requirements, evolving manufacturing technologies, and continued pressure on supply resilience, excipient suppliers are taking on a broader role in helping customers optimize formulations and manufacturing processes. For DFE Pharma, this evolution builds on its longstanding leadership in pharmaceutical lactose while expanding into a broader portfolio of excipients, technical support, and innovation partnerships.

The company is also strengthening its global supply network, investing in continuous manufacturing capabilities, exploring new applications for inhalation delivery, and using AI to accelerate productivity and innovation. At the same time, DFE Pharma is pursuing a more diversified portfolio and footprint to support customers across mature and emerging markets.

In this Transformational Growth Leadership discussion, Unmesh Lal, **Vice President**, Frost & Sullivan, speaks with Dr. Sven Abend, **CEO**, DFE Pharma, about the company's evolution from a lactose specialist to a multi-excipient platform, the changing needs of pharmaceutical manufacturers, supply chain resilience, continuous manufacturing, sustainability, AI, and the strategic priorities shaping DFE Pharma's next phase of growth.

> "We want to have better access to a broader portfolio of excipients because we believe that with the rise of continuous manufacturing in particular, the need for co-processed solutions and pre-formulated concepts will be the future of this industry."

— Dr. Sven Abend, CEO, DFE Pharma

Building on a Strong Foundation in Pharmaceutical Excipients

Unmesh Lal: ***DFE Pharma has established a strong position in pharmaceutical lactose, as well as oral solid dose and inhalation excipients. How would you describe the value DFE Pharma creates for customers today?***

Dr. Sven Abend: Our core strength is in oral dosage forms. DFE Pharma stands out through the purity of its excipients, resilient supply, and security of supply, which has been proven through the many disruptive events of recent years. This is accompanied by strong technical expertise and significant efforts to improve the sustainability of our supply chains.

We are known as the undisputed leader in pharmaceutical lactose, but over the years we have widened the range of excipients we offer in the filler and binder space, including microcrystalline cellulose and starch, as well as specific super disintegrant molecules that we have brought to market. During COVID, we also expanded into sucrose and trehalose, giving us a foothold in the injectable and biologics space.

So, clearly, our core competence is everything around lactose, but increasingly, we are becoming a **multi-excipient platform**, and that is also our strategy moving forward.

We create value through a differentiated offering and technical support. Our focus is on becoming an expert in helping customers optimize formulations for direct compression and continuous manufacturing tableting processes. We focus on establishing cost-effective manufacturing processes and optimizing the total cost of ownership for customers by bringing our technical expertise and helping design excipients according to the needs of those processes.

Frost & Sullivan's **Transformational Growth Leadership Program** aims to honor visionary business leaders who possess the foresight and leadership acumen to drive positive change within their organizations. The leaders we celebrate hail from diverse sectors and company sizes, yet they all share an unwavering commitment to innovation and excellence.

One area where we are particularly strong is dry powder inhalation. We can offer highly customized solutions to optimize customer formulations in this space, which is one reason for our leading market position in powder inhalation. Lactose is also the most preferred carrier, so the combination makes us a strong player in powder inhalation.

Looking Beyond Traditional Formulations

Unmesh Lal: ***As pharmaceutical innovation increasingly moves toward biologics and other advanced modalities, how is DFE Pharma aligning with those clinical pipelines? Where do you see the strongest opportunities for differentiation?***

Dr. Sven Abend: The growth of new modalities in biologics is one of the growth factors for the industry moving forward. The challenge for an excipient supplier in biologics is that it is a very fragmented space. There are a couple of core functionalities you need, such as sugars and surfactants, and apart from the sugars, where we are starting to build competency, that is not really our space today.

Do we have this on our radar? Yes. But are we advanced in getting real traction in that market? At this moment in time, that is certainly not an area we are actively pursuing.

Where we do see a specific opportunity is in inhalation. We anticipate that inhalation could become a delivery form for these modalities in the future. As biologic modalities become more mainstream and standard medications, there will be a need to find solutions for applying those products beyond injections.

Given the complexity of proteins in the formulation space, we believe inhalation could offer a patient friendly route of administration that brings a breakthrough in this respect in the mid to long term. That is one area where we are investing in R&D and development, particularly together with our industry alliance “INTO”, to develop platforms that are convincing and suitable for these modalities.

Designing Resilience into the Supply Network

Unmesh Lal: ***Supply resilience has become increasingly important across the pharmaceutical value chain. How does DFE Pharma ensure consistent quality, reliable supply, and business continuity throughout the commercial lifecycle?***

Dr. Sven Abend: DFE Pharma is a true global player serving the global market, with representatives in all relevant regions. We have a strong manufacturing footprint in Europe, as well as in India and New Zealand. For our most core products, we have multiple sites that provide backup.

But we approach supply security from a holistic perspective. We are known for very robust supply security, and we are the first and so far, to our knowledge, the only excipient supplier to have achieved **ISO 22301 certification for business continuity management.** That demonstrates how central this element of our service is. We address the topic holistically, rather than simply offering backup supply sites.

Over the last few years, we have also built a global supply network with local warehouses in the most relevant and growing markets. These help us build supply chains with enough buffer to accompany short-term challenges and provide sufficient backups along the way. Being closer to the customer through supply chain management also helps us increase our service levels.

Control of Quality is another important element. Supply disruption can sometimes be related to quality issues, so we are backward integrated into quality control along our supply routes. Even where we depend on third-party supplies, we have full control of quality control. Lactose is a major food commodity, and we are literally embedded in that process. This allows us to identify quality concerns early and avoid disruption where possible.

Balancing Global Reach with Local Market Dynamics

Unmesh Lal: ***DFE Pharma has a significant footprint across Europe and emerging markets in Asia. How would you describe the balance between mature and developing markets, and where do you see the biggest opportunities?***

Dr. Sven Abend: The reality is that we are quite equally distributed across the globe. There is no region that I would describe as underdeveloped. China is definitely still an area where we can grow significantly, although geopolitical tensions are also something we need to consider.

Europe is, of course, a dominant force, but it does not stick out significantly from the other regions. We feel quite well balanced across our regional markets, with different challenges in different regions.

As a premium-end and high-quality supplier, we are more challenged in relatively loosely regulated emerging markets where costs may matter more than the regulatory environment. That is fair. But as we address these markets through a **total cost of ownership approach**, we also have a strong proposition for customers who look more holistically at cost rather than simply at the price of lactose.

At the same time, we are seeing demand for specialty grades in emerging markets as customers increasingly adopt highly effective tablet manufacturing processes such as direct compression and, increasingly, continuous manufacturing.

Strengthening Resilience Through Diversification

Unmesh Lal: ***Beyond domestic warehousing, are there other strategies DFE Pharma is considering to further strengthen supply chain resilience?***

Dr. Sven Abend: We take this topic very seriously. We constantly evaluate our supply chains and try to diversify as much as possible. It is not always straightforward, but we are working on it.

We are also assessing investments into local manufacturing, particularly in North America, as well as in China and India. These are among the most important markets, and the objective is to have a mid- to long-term perspective on diversifying our supply base beyond Europe, including for competitiveness reasons.

There is also an important distinction within our portfolio. We differentiate between low-end and standard lactose grades, such as typical 200M grades, and specialty grades that we manufacture for high-end processes such as direct compression and continuous manufacturing.

It is very evident that our growth is coming from those specialty grades. Wherever new direct compression lines are coming on stream, for example, our specialty-grade business is growing significantly, at double-digit rates. We see this demand in emerging markets as well, including India

Why Expansion Will Increasingly Be Partnership-Led

Unmesh Lal: ***As you look at expansion, should we expect that to come primarily through greenfield investment, or do you see a greater role for M&A and strategic partnerships?***

Dr. Sven Abend: We do not rule out any paths, but the reality is that most expansion will most likely come through **inorganic M&A or strategic equity partnerships.**

One of the challenges you face as a purely focused excipient supplier is that the market dynamics are not necessarily fast enough for large greenfield investments to be filled quickly. More diversified portfolio players have an advantage because their excipient business can be part of a broader business and they can build up scale and expand capacity alongside it.

For a purely focused excipient supplier, building a large-scale plant that may only reach sufficient utilization three or four years down the line can be a very difficult business case. So, the majority of our expansion and diversification will come through M&A or other kinds of partnerships.

Turning Continuous Manufacturing into a Customer Innovation Platform

Unmesh Lal: ***DFE Pharma has also expanded its Closer to the Formulator (C2F) facility and developed a continuous manufacturing platform with Gericke. What measurable customer outcomes are you seeing from these investments?***

Dr. Sven Abend: This is an important milestone for us. We are, to our knowledge, the only excipient supplier with such a facility. The interest from customers across the spectrum such as innovators, large-scale generics, and smaller generic players in emerging markets, has been overwhelming. Since we inaugurated the facility, we have already had multiple workshops, which were completely overbooked, and we are already planning the next cycle because the industry interest is extremely high.

Customers appreciate having someone who can help them learn about the process and optimize formulations in a less critical environment than their own manufacturing space. This gives us a good opportunity to work with customers and learn together how to optimize a formulation for an effective continuous manufacturing process.

The partnership with Gericke brings in the machinery expertise, creating a strong synergy. It has also given us access to MSA teams and R&D teams at customers that are normally not so easy to access.

It is still early days. We inaugurated the facility at the beginning of the year, and we already have a fully booked test schedule with customers running tests and conducting formulation development with us. So, it is too early to talk about the measurable output. But I am very confident that those tests and formulation developments will reach the market in the near-term future.

Making Sustainability More Traceable

Unmesh Lal: ***Sustainability is increasingly becoming part of pharmaceutical manufacturers' supplier-selection criteria. How does Ecolact 2030 create practical value for customers?***

Dr. Sven Abend: Ecolact 2030 is the first excipient in the market where, thanks to our integrated supply chain back to the dairy farm, we have access to the raw material at the dairy farm and can demonstrate verifiable reduction of CO_2 (carbon dioxide) emissions along that value chain across the entire supply chain. This is very much in line with the SBTi principles. I think this is unique and is also very much linked to our fully integrated value chain with our suppliers, which are dairy cooperatives. Because of that integration, investments at the farm can be tracked directly to our lactose. The reductions are mainly related to investments in modern production methods, feed additives used for cows, renewable energy capacity at the farm, logistics improvements, and other measures. We can then demonstrate a significant reduction in the CO_2 footprint of that food supply chain into the pharmaceutical sector. The market response has been very positive because it is rare for suppliers to offer that kind of Science Based Targets initiative (SBTi) compliance and transparency.

The interest is mainly coming from companies in Europe and North America, as well as global players with specific sustainability targets. We have a long list of customers where we are actively evaluating how to implement these supply chains and how to share the associated costs. It is clear that farmers will not be able to cover the full cost, so we need to find a fair way to pass the cost across the value chain, from the farmer through to the patient.

Trust, Consistency, and the Value of Long-Term Partnerships

Unmesh Lal: ***What evidence demonstrates DFE Pharma's customer loyalty and its position as a long-term formulation and supply partner?***

Dr. Sven Abend: For decades, DFE Pharma has been a market and technology leader with a clear focus on lactose-based excipients and has consistently delivered strong value to customers in that core business.

There is an unmatched element of trust, which I think is still a true value in the pharmaceutical industry and should not be underestimated. Because of our core focus on pharma, lactose, and excipients, we are one of the few excipient suppliers with such a dedicated focus on this industry.

Some competitors in this space are more diversified and can shift their focus and support toward other industries where they can generate more value. I think this is part of why DFE Pharma is often a preferred supplier: it is this high and long-trusted dedication to the industry. That trust has also created very strong relationships that we can increasingly leverage to join developments and innovation around emerging process technologies such as continuous manufacturing.

Another proven value we bring is extremely consistent quality. The more you push the boundaries in the tableting process, even within an agreed specification, having very stable quality and less fluctuation can positively impact process performance.

We have a high level of integration along the value chain, including control of the milk source that goes into our process. There is a strict regime around the regional source of the milk we process, so quality deviation from that natural product is very limited and highly controlled. That leads to the extremely consistent quality that we have demonstrated over the years. It is one of our key value creators and differentiators.

Innovation That Responds to Customer Needs

Unmesh Lal: ***Looking at your recent investments, which innovations and improvements do you believe have created the greatest benefit for customers?***

Dr. Sven Abend: For sure, I would point to our C2F facility in Hyderabad. With the investment in continuous manufacturing, it is now a well-recognized facility that, I don't think, our peers can offer in the same way. Our highly dedicated R&D center in Nijmegen is another important element because it gives us the ability to adjust to customer requirements easily and effectively in terms of specifications. And, of course, our core expertise in innovation adds to that.

Beyond these recent investments, we are also extending our degrees of freedom for innovation through the expansion of our portfolio. A broader excipient platform enables us to develop more integrated solutions together with our customers and industry partners such as INTO, increasingly addressing not only formulation performance but also the total cost of ownership across the customer's manufacturing process. We already see this approach translating into concrete solution concepts, and we have a full pipeline of new customer-focused concepts as well as more fundamental innovations aimed at the major industry trends and unmet needs our customers are facing.

Moving From an Excipient Specialist to a Multi-Excipient Platform

Unmesh Lal: ***You have outlined the role of continuous manufacturing and next-generation manufacturing platforms. Looking further ahead, what is the strategic direction for DFE Pharma over the next three to five years?***

Dr. Sven Abend: Our current growth momentum over the next three to five years is very much linked to the expansion of direct compression lines, the patent cliffs coming into the market, and the rise of continuous manufacturing. This is the growth we are banking on.

We are known and perceived as the lactose expert, but we have a clear strategy and desire to expand our portfolio offering by becoming a **multi-excipient platform.** That does not mean becoming another me-too supplier in areas such as other binders or polymers. We do not think that simply adding products creates a lot of value. What we want is better access to a broader portfolio of excipients because we believe that, particularly with the rise of continuous manufacturing, the need for **co-process solutions and pre-formulated concepts** will be the future of the industry.

The single excipient is probably not enough anymore. By having better access to a broader and more integrated platform, we increase the degrees of freedom we have when innovating together with customers. So, our underlying strategy is to become a multi-excipient platform step by step, in a controlled and meaningful way that adds value. That will allow us to accelerate innovation along customer developments and market trends.

From an investment perspective, we will expand our capacity for specialty lactose grades when needed and hopefully align that with a more diversified global footprint for these facilities. We are also planning to invest in specific modular manufacturing spaces to drive innovation in this area.

Tailoring the Customer Experience by Segment

Unmesh Lal: ***Pharmaceutical customers have very different needs depending on whether they are large innovators, generics companies, emerging businesses, or other players. Are you seeing shifts in these segments, and how are you adapting your engagement model?***

Dr. Sven Abend: We have a very defined and clear customer and market differentiation approach. We have segmented market demands by customer group—generics, innovators, rising small startups, and others and linked that to our internal customer segmentation. That allows us to tailor our services and offerings to those segments.

There are significant differences between customers. A large innovator with tremendous R&D resources probably does not need as much technical support in formulation development as a generics company, particularly an emerging or smaller mid-sized generic company.

For innovators, it is important that we establish ourselves as a trusted and reliable supplier. Once you are in the excipient books, you support them along the way as they launch products and remain a trusted supplier throughout the journey.

We also focus strongly on the generics market, both large global generics companies and smaller regional generics companies. This is an area where we believe we can make a difference through our expertise and by bringing concepts that help customers accelerate their go-to-market approach and fast-track formulation development for upcoming patent cliffs.

We see that need rising, so we are changing our approach to those markets and building dedicated support and service packages for different market segments.

AI as a Lever for Innovation and Productivity

Unmesh Lal: ***There is hardly a business discussion today where AI does not come up. How is DFE Pharma leveraging AI internally?***

Dr. Sven Abend: AI is a key lever for us to accelerate innovation. DFE Pharma has the benefit of being a relatively small and medium-sized enterprise that is highly focused.

Our organization is also relatively young on average, while still being very experienced, so we have a good blend. Over the last two years, we have significantly accelerated our utilization of AI and have a full pipeline of ideas for how to implement AI across everything we do, including innovation.

I cannot share too much, but I am very excited about how we are addressing this topic. I am personally very committed to implementing AI in everything we do where it adds value, and I am extremely pleased to see how quickly our organization is adopting these capabilities.

I can clearly see productivity gains across all aspects of the business. We are actively using AI in quality assurance and quality management, including interactions with customers, to accelerate responses to quality questions and improve our CAPA process for speed and accuracy. So, AI is all over the place at DFE Pharma, and I am pretty sure we will see it influencing our business, including our business model, moving forward.

Three Words That Define DFE Pharma

Unmesh Lal: *To close, if you had to describe DFE Pharma in three words, what would they be?*

Dr. Sven Abend: 21st-century trusted innovator.

Unmesh Lal: *That really does reflect your responses. It sounds like DFE Pharma engages early and supports the customer journey through commercialization, which is particularly important in this industry given the stickiness of those relationships.*

Closing Reflection

DFE Pharma's evolution reflects a broader shift in the pharmaceutical excipients industry: value is increasingly being created not simply through the supply of individual ingredients, but through technical expertise, consistent quality, resilient supply chains, formulation support, and collaboration around new manufacturing technologies. DFE Pharma's strategy builds on its established lactose leadership while expanding toward a multi-excipient platform designed to give customers greater flexibility in developing co-process solutions and pre-formulated concepts.

At the same time, investments in continuous manufacturing, sustainability, AI, customer-specific support, and a more diversified global footprint are positioning the company to respond to changing market needs. As Dr. Sven Abend puts it, the ambition is to be a **"21st-century trusted innovator"**, combining the trust built through decades of pharmaceutical focus with the innovation capabilities needed for the next phase of the industry.

Dr. Sven Abend | Chief Executive Officer, DFE Pharma

Dr. Sven Abend is the **Chief Executive Officer** of **DFE Pharma**, a global leader in pharmaceutical and nutraceutical excipient solutions. He brings 25 years of global business leadership experience in the chemical industry. Before joining DFE Pharma, he served as CEO of Gelita, a manufacturer of gelatin and collagen peptides for the food, health, nutrition, and pharmaceutical industries. Previously, he held leadership positions at Lonza, including Chief Strategy Officer and Chief Operating Officer, and served as Business Manager and CEO at Kolb. He also held roles at Cognis. Dr. Abend holds a PhD in Chemistry from Christian-Albrechts-Universität in Kiel, Germany.

Unmesh Lal | Vice President, Frost & Sullivan

Unmesh Lal brings over **20 years of experience** in healthcare strategy and consulting, with a focus on global life sciences and bio-pharma manufacturing. He specializes in identifying transformative technologies, innovative business models, and growth opportunities across pharmaceutical contract services. A recognized thought leader, Unmesh has authored key industry insights and presented at leading global events including J.P. Morgan, CPHI, Bio-Asia, Bioprocessing Summit, Biotech Outsourcing Strategies cmc, and others. He holds a master's degree in biomedical engineering from the University of Michigan–Ann Arbor.

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Appendix: Industry Developments Shaping Pharmaceutical Excipients

As pharmaceutical manufacturing evolves toward more efficient processes, specialized formulations, continuous manufacturing, and more resilient supply chains, excipient suppliers are increasingly becoming technical and innovation partners to pharmaceutical manufacturers. Frost & Sullivan research provides strategic insight into the technologies, business models, and growth opportunities shaping the pharmaceutical and life sciences ecosystem, including:

- Growth Opportunities in Biologics Contract Development & Manufacturing Organizations, Global
- Top 10 Growth Opportunities in the European Life Sciences Industry, 2026
- Growth Opportunities in Global Pharmaceutical Industry