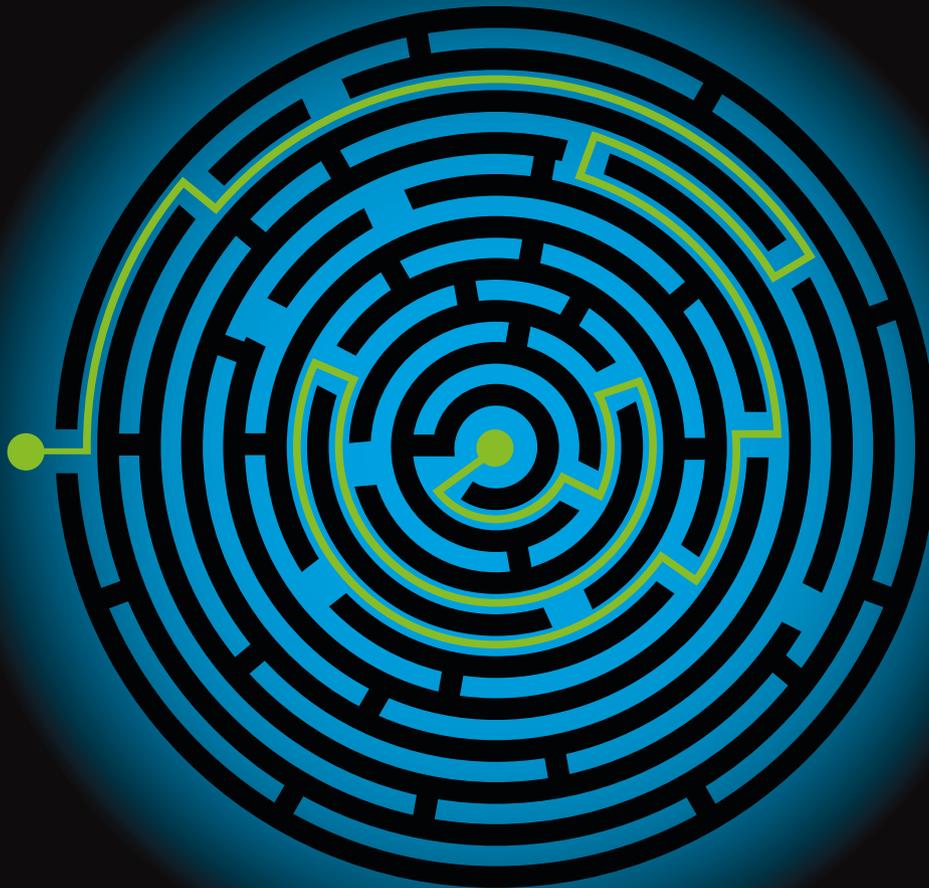


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Innovative Routes to Market

Rethinking the Life Sciences

Distribution Model

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Introduction

Routes to market or distribution models are often overlooked as a source of competitive advantage in life sciences. This isn't surprising; a new medicine can add billions in revenues, while logistics costs are only a small proportion of the cost of goods sold.

This is changing quickly. Trends such as patients acting as healthcare consumers, the dramatic shift towards biotechnology products, and stretched healthcare budgets are all forcing manufacturing leaders to relook at their distribution models and consider new and innovative routes to market.

A recent Deloitte survey¹ for example showed that executives of pharmaceutical companies agreed that direct to patient distribution models are a vital differentiator from competitors. Surprisingly, although direct models can reduce distribution spend by 15-20% while improving patient experience, only 30% of pharmaceutical companies have implemented these models.

This is due to the complexity and scale of change required across functions, departments and geographies. While these issues are real, they can be overcome with top-down strategies to improve patient access, achieve closer patient relationships and take advantage of regulatory changes.

Collaboration with Third Party Logistics Providers (3PLs) and distributors in order to deliver innovative, differentiated services is key. In many cases there is huge potential to consolidate providers, and to enhance end-to-end visibility of supply chains.

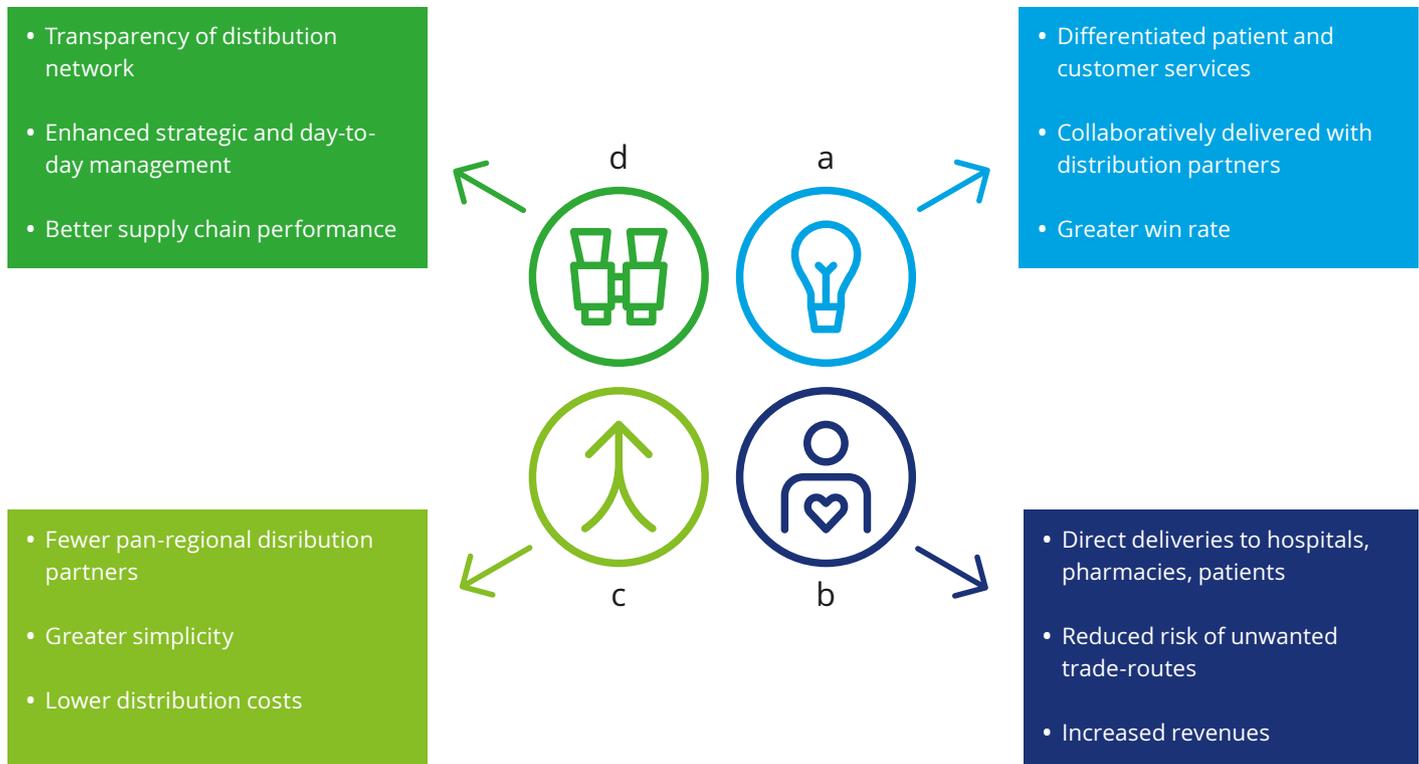
This paper discusses ideas for innovative routes to market and shares examples, drawing on Deloitte's experiences of working with Life Sciences organisations across the globe. It is intended as a point of view to stimulate discussion and debate.

¹Life Sciences Supply Chain Benchmarking Survey, Deloitte, LogiPharma 2015

Rethinking the Life Sciences distribution model

Life science companies have four major opportunities to transform their distribution and route to market models, to enhance cost effectiveness and differentiate services, see figure 1.

Figure 1. Benefits of innovation in distribution



a. Incorporate Innovative Services

Distribution partners can contribute significant added value to Life Sciences companies particularly across the technology, commercial and operational parts of the value chain (figure 2).

Figure 2.

- On-line pharmacy
- Social media collaboration tools
- RFID, real-time temperature tracking



Technology

On-line pharmacies offered through distribution partners offer patients greater convenience and improved experience. While there can be challenges around remote clinical assessment and increased channel complexity, there are real opportunities to enhance patient satisfaction and grow revenues.

The growth of on-line prescribing is an important topic too. For example, UK-registered Online Doctors can now provide fast treatment and advice without face-to-face appointments. Integrating supply of medicines seamlessly with this capability can also enhance patient experience and differentiate life science company services.

Social media is also enabling new possibilities. A leading multinational pharmaceutical company for example used social media tools to create a virtual supply chain community for use by internal teams and distribution partners. Discussions fostered through social media in this way enabled major lead and cycle time improvements.

Commercial

Although many distribution partners offer order to cash services, more advanced commercial arrangements such as benefits sharing are still relatively uncommon. Benefits sharing helps to align objectives of life science companies and logistic partners. For example benefits sharing enables more flexibility than traditional, transactional contracting in product launch situations when market demand is unknown.

Benefits sharing requires greater emphasis on team collaboration between life science companies and distribution partners. Governance structures and terms of engagement are also critical.

Organisations that have embraced this way of working, and that have invested in people and approach have key advantages over competitors slow to embrace this way of working.

Another interesting commercial opportunity exists with wholesalers who own pharmacy chains. These partners can train their staff to communicate the benefits of products which can deliver sales advantages. Several providers also offer real-time updates on product usage making a clear link between commercial and operations planning.

Operations

There is significant scope to increase the involvement of distribution providers in operations. Some offer competent postponement services, as well as basic assembly, and kitting. The benefits of configuring products closer to final markets can be a differentiator, particularly for high frequency, fast response products (to pharmacies for example). Postponement services can also benefit consumer markets, particularly in terms of online channels where agility and short delivery times are needed.

Postponement strategies delay final configuration of a product to the last minute. It dramatically reduces inventory obsolescence and improves customer service. Volatility is also reduced as a consequence of pooling several smaller demand streams. It readily applies to final label and packaging where there are various models.

For example:

- deliveries to hospitals or pharmacies have fast pull configurations from small stocks with affiliates.
- a make to order model can be appropriate in the case of large orders, where orders are issued direct from the 'bright-stock'² holding point.
- large tenders would require further decoupling, before assembly and would take longer to fulfil. Commercial management of customer lead-time is critical as is rapid QC processing (sometimes at risk).

We are seeing an increasing number of life science companies take up postponement approaches particularly for high value, low volume medicines such as biosimilars. However there are still many companies without postponement suffering stock-outs, obsolescence and poor working capital positions. It is our view that the adoption of postponement must be accelerated across the industry given the substantial returns from investing in the approach.

At a strategic level some providers are also beginning to offer advice on network configuration, albeit based around their assets. Nonetheless this type of analysis can provide valuable insights for companies deciding trade-offs between, for example, local and regional distribution hubs.

Any analysis should consider necessary delivery frequency, product flows, and lead-times to determine centres of gravity. From this, optimal hub locations can be decided. Advanced analytics are necessary, combined with deep understanding of the industry and markets.

² Bright stock is final product prior to label and packaging



Innovation Example - White Line Printing

Driven by increasing competition, the patent cliff and a growing variety of presentations, lot sizes in the pharmaceutical industry have been falling continuously for several years. This not only has a direct impact on the efficiency of packaging lines but also adversely affects production costs through higher warehousing and depreciation costs for packaging material and product.

The White-Line concept is based on "white" (blank or unprinted) materials. Both lidding films and boxes and inserts are not printed with the country-specific information until they are in the packaging line. Inspection and camera systems provide a 100% check, guaranteeing pharmaceutical safety. With this concept, many small lots, which in a traditional production line mean very long changeover times, can be combined into one large lot. The switch to a different language is controlled automatically by a line management system and is completed within 10-12 minutes.

The advantages of White-Line production are impressive. Initial customer experience shows that small lots which previously took 4 days to produce owing to the long changeover times can now be processed in just one day. But it is not only line efficiency which can be improved dramatically. The concept also allows for an extremely fast time-to-market, as production can be started almost immediately after receiving national approval. No lead time for individual films, leaflets and folding boxes is needed, as only an electronic layout is required. This results not only in time savings but also lower storage costs. If the layout changes, existing inventory no longer has to be destroyed. Also, thanks to demand-based just-in-time production of the lot, the storage and depreciation costs for stored "residual lots" are reduced.

A robust, end to end business case should be developing when assessing the benefits derived from capital expenditure for new packaging line technologies against the on-going costs of an external partner providing these services.

b. Target direct delivery models

Although direct delivery models have been in place for a number of years, we see that the term is frequently misused; direct deliveries to affiliates is very different to direct to hospitals, pharmacies and patients. There are a number of developments pharma companies should be thinking about.

The first relates to countries that are traditionally wholesaler led (e.g. in Scandinavia and Eastern Europe). Up until recently direct deliveries were not possible. However, several of the highly specialised firms that are vertically integrated with pharmacies can offer 'fee for service' models.

This has major benefits, particularly for companies shipping high value, specialised medicines. In these new situations they can now maintain ownership to customer and minimise risks of unwanted trade flows sometimes accounting for 5-10% of revenues. It is important to note that these deals are often only achieved in conjunction with consolidation of partners and when significant volume and value is 'on-the table'.

Second is the opportunity to better understand customer requirements. Often direct models are implemented and forgotten. As such the opportunity to mine data for customer insights is missed. Many pharma companies could do much more to understand customer needs and tailor services appropriately. Advanced analytics and business intelligence tools are key enablers.

Finally, another major benefit of direct delivery models is the opportunity to avoid wholesaler margins. A leading pharmaceutical business increased margin by switching to 'fee for service models' with wholesalers acting in 3PL mode.

When assessing the wholesaler margins paid to distributors for route to market services, a combined approach is required between commercial and distribution functions. For example, a global pharmaceutical business recently determined that 70% of compensation paid to distributors was provided through on/off invoice discounts and commissions, invisible to the logistics organisation and not traditionally captured in operational expenditure.

c. Consolidate distribution partners

While there are good reasons to involve several different providers across a region (e.g. Scandinavia's wholesaler led market requires different types of distribution partner to Italy where direct models are possible) many companies can make savings, in the order of 5% to 15% of distribution spend, by consolidating distribution partners.

For instance the distribution network of a biopharma firm had evolved over a number of years and was largely defined by local affiliates. It was complex with around 40 distributors and 3PLs across Europe operating full cold-chain distribution for biosimilars.

By taking a central view, the firm was able to reduce to only two partner organisations, yielding a 15% cost reduction overall and the ability to increase revenue by eliminating unwanted trade flows. In some countries price reductions of 50% – 60% were possible, while at the same time enabling direct delivery models.

Consolidation should be considered both in terms of breadth and depth of distributors. Many regions around the world feature multiple tiers of distributors who are used before the product reaches the end customer. Pharmaceutical businesses can bypass and collapse many of these tiers to reduce margin erosion and improve visibility and accuracy of the demand signal from the end customer.

The use of advanced analytics to understand trade flows and opportunities to rationalise is fundamental to assessing and consolidating distribution providers. Developing successful tenders and quotations for pan-regional providers requires analytical capability combined with deep understanding of markets and distribution models (typically wholesaler, distributor and 3PL will need to be considered depending on requirements).

Smaller companies are leading the way in terms of consolidating partners. Larger companies are only just beginning to address this topic. In these cases there are major savings potentials, but greater complexity and challenge in working across countries with hundreds of distribution partners. Rigorous programme management, strong stakeholder engagement and analytical horsepower are therefore vital.

d. Achieve end-to-end visibility

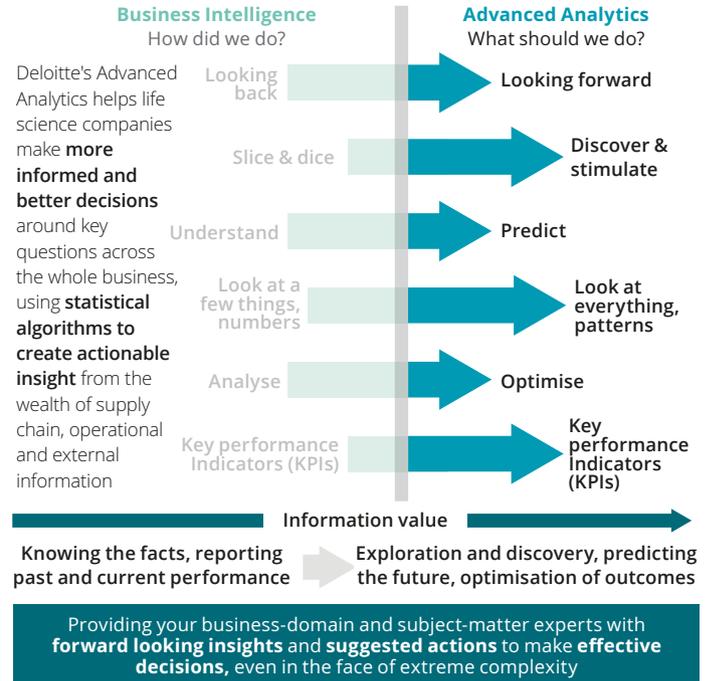
Supply chain visibility is key and an ongoing challenge for effective management, particularly for controlled and specialised medicines. Companies producing and supplying these medicines often have extended third party manufacturing networks, unpredictable production processes and experience volatile demand. Here ‘control towers’ are powerful solutions, especially when combined with fast growing areas of active tracking sensors.

A ‘control tower’ is a single command centre for visibility, decision-making, and action, based on real-time data. Typically cloud based, these systems collect and aggregate orders, shipments and inventory levels. Simple systems focus on visibility while advanced setups are predictive and can highlight issues before they become problems. Sell-through data from distributors can be integrated into these systems to improve forecasting accuracy and optimise end to end inventory holdings.

A number of the leading 3PLs offer these services, giving insights to reliability of temperature control as well as end-to-end stocks for example. Pharmaceutical companies are beginning to engage with the idea of a mission control centre where real-time dashboards enable more effective decision making and control.

Advanced Analytics can also be applied to enable supply chain insights. Deloitte has proven, specialist capability to help better predict and react emerging supply chain challenges, see figure 3. Many businesses are only just beginning to benefit from this approach, but those that have are experiencing substantial gains.

Figure 3. Advanced Analytics



Conclusions

As the healthcare landscape continues to evolve and become increasingly complex, innovative distribution models represent a major opportunity for Life Sciences companies as they position themselves for growth and better patient outcomes.

Life science companies stand to gain from innovative routes to market when answering 'yes' to the following questions:

- The existing distribution network could be described as overly complex and fragmented, with high number of distribution partners
- Distribution costs are considered to be too high, and are increasing
- Competitors are successfully differentiating products, evidenced by declining market share
- New products are being launched using existing distribution networks, with little or no development to specific requirements

- Insufficient supply chain data exists for reliable management decision making
- Customer requirements are not fully understood and distribution network could be better aligned to needs
- Relationships with distribution providers are tactical, and not strategic

The journey to higher performance will be unique in every organisation. Some may want to accelerate and expand existing efforts while others may want to launch new initiatives. What is important however is that conversations around the right topics take place, and that senior teams align and commit.

We hope the insights provided will create rich dialogue on how to deliver innovative routes to market and new distribution models and we welcome your feedback and views.

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