

Chemicals Practice

# How chemical players can win in the transition to digital platforms

Many B2B buyers prefer purchasing products using digital channels. Choosing the right operating model is critical for reaching customers across the chemical industry's fragmented markets.

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**Digitalization—and digital marketing in particular**—is an increasingly important topic for chemicals. In the past year alone, several new online marketplaces (or “digital platforms”) have emerged, creating new opportunities for industry players to reach millions of customers. The COVID-19 pandemic has further strengthened the arrival of digital platforms with increased remote ways of working. As a result, many chemical companies are trying out new types of online interaction with their customers.

Those looking to enter the digital-platform game are likely to encounter both opportunities and risks. For instance, highly customized products and consolidated customer bases mean that increased digital marketing may not necessarily result in increased sales, and standard products are often the best fit for platforms that feature multiple suppliers.

In any case, chemical players transitioning to digital platforms can win the game by moving quickly and updating their operating models according to a handful of shared success factors. In fact, our research shows that making the right moves can add 3 percent or more additional absolute earnings before interest, taxes, depreciation, and amortization (EBITDA).

### **Digital platforms in the chemical industry: A primer**

B2B buyers are increasingly open to purchasing products using digital platforms (see sidebar, “The four primary types of platforms”). A recent McKinsey survey of the European chemical industry showed that 55 percent of buyers of petrochemical products would be willing to adopt

## **The four primary types of platforms**

**Digital platforms** can generally be categorized as a combination of two categories: single manufacturer versus open, and transactional versus knowledge oriented.

### ***Single manufacturer–transactional.***

This type of platform has been around for more than a decade and includes WorldAccount by BASF and XIAMETER by Dow Silicones (formerly Dow Corning). While successful, these platforms have had no transformational effect on the industry, primarily because many buyers still require more services than these channels offer or because companies entered markets during suboptimal scenarios, such as times of oversupply.

***Open–transactional.*** For many years, the chemical industry has offered an ERP-to-ERP<sup>1</sup> solution with Elemica. While this model can realize significant transactional efficiency, it requires substantial investment and planning for users to set up. Thus, it is mainly attractive for large companies. In chemicals distribution, Alibaba’s subsidiary 1688 portal recently launched an open marketplace for suppliers and buyers.

***Single manufacturer–knowledge oriented.*** Many of these platforms are still being developed by individual players, such as makers of personal-care or coating ingredients, and are intended to digitize information formerly provided by experienced sales representatives and technicians. If successful, these types of

platforms could make it possible to provide high-quality service to small and medium-size customers at marginal cost.

***Open–knowledge oriented.*** These platforms are valuable for customers because they can provide practical solutions to real problems, including easy reordering, single logins for multiple suppliers, and increased market transparency. For platform owners, operating costs are minimized by economies of scale. More importantly, owning the platform can provide access to large sets of user data, which can be mined for customer insights, application, and platform learning—similar to the mechanisms that provide consumer preference and search data.

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<sup>1</sup> Enterprise resource planning.

digital channels if efficient and value-adding platforms were available. For specialty chemicals, this share is even higher, with 82 percent of customers willing to adopt digital platforms.

Chemicals distributors have started using platforms in the hopes of evolving into the “Amazon of chemicals.” Although these distributor platforms are currently unable to offer formulation-development services, they can offer a full portfolio of products from numerous chemical companies as well as detailed information on product specifications and applicability. Distributor platforms can also feature add-on services that can be challenging for smaller open platforms to provide, such as repacking.

Finally, new players are threatening incumbents. Whether digital superstars such as Amazon and Alibaba, or start-ups such as Molbase, Knowde, or Farmers Business Network, new players are creating digital platforms and setting up direct customer relationships. Despite the actions of chemical-industry incumbents, increased cost pressure (as new entrants incur lower costs than incumbents) and the push for high-quality customer experiences can shape competition in the years to come.

**The digital platform game: What fuels the competition?**

Prominent platforms, such as Uber or Airbnb, did not have traditional assets when they first launched. At their core, these services offer algorithms that match supply with demand by monetizing underutilized assets, such as personal vehicles and homes, not owned by industries. On these points, platforms can provide superior customer experience and attack large profit pools, especially when it comes to frequent reorder processes. For example, chemical customers are often forced to call sales representatives to order the same products they have ordered for years. The processes behind those transactions are often inefficient and ripe for digitalization.

Digital platforms are especially needed in areas of the value chain that lack transparency, such as supply and pricing, or those that have substantial inefficiencies, such as transaction executions or product-supply planning (Exhibit 1).

Exhibit 1

**Digital platforms can solve multiple shortcomings of supply and value chains.**

Supply and value chain		
	Lack of transparency	Inefficiency
Demand shortcomings	No overview on existing or future supply and impact on availability and price	Inquiries and transactions conducted via phone, fax, or email Order decision based on incomplete market overview
Supply shortcomings	No overview on existing or future demand and impact on production requirements, asset provisioning, or pricing decisions	Suboptimal pricing Inefficient production planning Inefficient asset planning
Digital platforms can be installed independently from asset ownership (decoupled from manufacturing or sales activities)—hence, a market can be disrupted by completely new players if they improve the positions of individual market participants.		

Setting up digital platforms isn't without risk, however; B2B customers might not be willing to maintain them, and logins for each of their suppliers can number in the hundreds. A consolidated platform—grouped by customer segment, chemicals, or region—could be a realistic solution once digital chemical-platform markets mature.

### **Application needs**

Consolidated platforms will be especially effective in situations where chemicals are combined to fulfill application needs, as is the case in specialty-chemical segments such as advanced paints and coatings, food, or engineering plastics. Traditionally, buyers of these applications relied on their supplier's advice or received mediocre solutions. Yet the limited number and volume of products sold to smaller customers is usually not enough to justify the time chemical-application experts spend fulfilling customer needs.

Today, however, solutions can be digitized and continuously improved via machine learning, so long as suppliers have access to user data. From there, digital platforms can aggregate application data. A few applications have already moved in this direction, including Farmers Business Network's e-commerce agrochemicals platform.

### **Product needs**

Chemical companies need to carefully decide when and with which products to enter a platform, if at all. Generally speaking, standard products are more suitable for open multisupplier platforms that can quickly and efficiently meet the needs of customers that are familiar with such products. Examples of these products include standard plastics and standard industrial chemicals such as acids and pigments and solvents. In addition, prices for these products are often more transparent, as customers are already familiar with these products.

Products in fragmented markets are more suitable for digital platforms than products sold to a few large customers because economies of scale in the sales function are higher (Exhibit 2). Examples of segments with fragmented customer bases include water treatment, food ingredients, feed ingredients, raw materials for coatings and adhesives, and pigments.

### **Who will win?**

As is the case in other industries, a “winner takes all” phenomenon is likely to occur in chemicals. However, there is a significant chance that the chemicals industry sees several platforms emerge to meet the needs of specific markets—for example, one winning platform for nutrition chemicals and one winning platform for chemical supply to the construction industry.

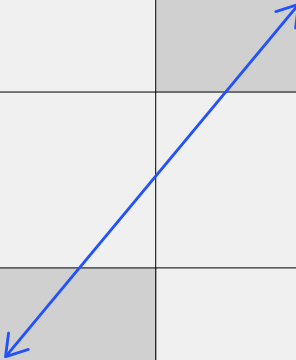
Winners among these platforms will need to expand to ecosystems over the medium term, offering products or services to adjacent industries. Likely, no single player will win. Rather, a joint venture comprising several chemical companies—in cooperation with a start-up that can contribute speed, agility, and a willingness to disrupt—will ultimately be successful.

Such platforms could present opportunities, especially for Asia-Pacific companies that struggle with their global go-to-market approaches because of cultural and market barriers—for example, Japanese and Korean players that rely on distributors. The automation or digitalization of the go-to-market model for small and medium-size customers presents a more efficient omnichannel model than is possible today. Even so, this omnichannel model will specifically help companies with commercial models oriented toward distributors.

Exhibit 2

**Digital platforms are especially attractive for standardized products in fragmented customer markets.**

Level of product customization	Fragmentation of customer base	
	Low	High
Standard products		Most suitable for digital platform
Limited application development		
Tailored application development	Least suitable for digital platform	



#### What chemical companies need to do now

To build a successful digital platform, companies must first understand what existing customer needs are and identify what problems the platform will solve. The XIAMETER platform by Dow Corning, for instance, offered products at a lower cost through the platform than through representatives.

*Chemical players must understand the required investments and success metrics to build a digital-platform business.* This endeavor can be expensive, and it requires full commitment across the organization. Advanced-analytics capabilities are also critical. The integration of next-product-to-buy algorithms that offer suitable products to single customers will become as important as allowing

customers to search for outcomes rather than inputs (such as applications) or specific technical-property requirements (such as surface hardening and foam reduction).

*Move fast with an agile mindset. Get to market quickly with core functionality and select products.* Test and learn before falling into the trap of applying classic success metrics (revenues and profits)—and trying to measure the platform as if it is a big business. Chemical purchasers identified two criteria as most relevant on digital platforms: fast lead time and better order overview and tracking. Both are no-regrets moves to start working on today that better fulfill customer needs and lead to an improved customer experience.



*Partnerships are decisive, both within and outside the value chain.* Chemical companies have numerous options for partnerships, all of which can help ensure success. For example, they can partner with distributors, or even other chemical companies, to develop a platform for a single chemical product group. Or they could partner with tech companies to expand their reach.

*Chemical companies should consider developing their own platform ecosystem.* The process of easily ordering chemicals could become stale to customers quite quickly given the many activities required by B2B purchasers. Thus, companies should consider how to make this development attractive to B2B purchasers while also considering logistics players, insurers, financing companies, and sustainability agents. If buyers place orders, companies could think about how they might enable certified logistics players to bid for delivery. Other considerations include whether the ecosystem can manage transactions and collect payment data, how to pull in banks for credit offers and insurance companies to offer credit-risk insurance, whether risk needs to be managed, and how to create business offerings around the original offering to tap into adjacent value pools.

The worst possible outcome for incumbents is to be shut out from winning platforms, especially as customers migrate to them. Such scenarios pose an existential threat for all players, except those rare few whose competitive advantage in manufacturing costs and scale makes them irreplaceable in the market. For specialty and solution players, being left out of a winning platform would mean being blocked from access to customers and their application data, potentially missing out on insights to inform continuous improvement of their innovations and customer service.

### **How digital platforms can disrupt organizations**

Just installing a platform without changing the organization will not be successful—the company's operating model needs to change as well. The following points must be considered when doing so:

- Focus on data and information relevance and quality: information on platforms need to be available, correct, and always up to date.
- Prepare for rapid changes in customer demand: platforms lead to more volatile customer behavior, which means supply-chain, manufacturing, and procurement departments must be ready to react.
- Set up a 24/7 technical service: a platform raises demand on service levels, and companies must be ready to react immediately to customer requests.

In addition to the digital platform, algorithms based on advanced analytics can help boost the business—for example, by automating with advanced pricing algorithms and by personalizing customer offerings based on product-allocation algorithms.

A digital platform is not the endgame, however. Chemicals companies will be successful in the long run only if they can manage omnichannel models that connect and align all channel participants, such as key account management, telesales, inside sales, or digital channels. Omnichannel models also make it easier to identify and track customers, creating opportunities for chemical players. Companies could track customers' search words and see which products they researched, added to a shopping cart, or purchased. Then the sales-account manager can follow up offline to discuss further potential sales opportunities with customers based on their search activities.

attract customers presents a classic chicken-and-egg problem. Yet massive commercial benefits can be realized by those that solve it.

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To move quickly toward digital platform models, chemical companies will need to carefully evaluate distinct opportunities, risk, and common success factors. Doing so can help players find the best approach for the needs of their customers. It's easy to imagine matchmaker business models that work when there are tens of millions of customers—and an equal number of businesses or service providers catering to them. Getting there, however, will be difficult. Figuring out how to get off the ground and

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