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# BACK TO THE FUTURE

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# MANUFACTURING BEYOND COVID-19

## **CHANGING DEMAND IN A POST COVID-19 WORLD HOW CAN MANUFACTURERS KEEP UP?**

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## INTRODUCTION

During the COVID-19 crisis, the customer behavior and the way of interaction with the producers and retail are changed, impacting the traditional demand management and go-to-market approach. This new way will be more emphasized in the so-called next normal phase. The new habits, preferences and needs affect how, where and with which products or services the companies will serve the consumers in B2C and how they must interact with its own customers in B2B.

These rapid shifts have important implications for any company. Considering many of the longer-term changes are still being formed, companies have an opportunity to help shape the next normal. Despite all the challenges, a lot of surveys realized by the major consulting firms and think-thank around the world show that many believe the world competitiveness gap can be closed in a post-pandemic world. This may depend on how well companies are able to weigh the risks, translate hope into bold action, and outmaneuver the uncertainty that everyone has felt in the first half of 2020. The goal of this document is to analyze how the expectations are changed, how and what the companies need to do to face this floating and dynamic demand in the next normal across the world.

The document is organized as follows. The first section describes the context and how the demand has been affected by the global pandemic. Brief considerations regarding the “bullwhip effect” clarify the direct linkage between the changes in consumers’ behavior and, consequently, in their demand, and related impact in the whole value chain. The second section suggests solutions for companies facing challenges and opportunities in the next normal, considering both the supply chain and the new go-to-market models as responses for floating demand management. Finally, the third section presents the conclusion.

## CONTEXT

### DEMAND IS UNCERTAIN AND CONSUMERS’ BEHAVIOR HAS CHANGED

During the months of lockdown and self-isolation, we have been writing a new future. This future is uncertain; demand has proven to fluctuate in an unpredictable way, showing all the limits of the companies in adapting to uncertain environments. This uncertainty has been evident in supply chain: at each upstream link in the supply chain, orders were amplified, as buyers attempted to re-stock shelves. This is due to the fact that the amplitude of demand fluctuations increases as the distance from the origin increases, this is the **bullwhip effect**. In fact, in a bullwhip, a small movement with the hand produces a significantly greater movement at the tail of the whip. The bullwhip effect, to a greater or lesser extent, is likely to be a feature of the post-coronavirus next normal (see Figure 1). For consumers and businesses within consumer-based supply chains, **‘just in case’ is likely to replace ‘just in time’**.

### BULLWHIP EFFECT

SMALL CHANGES IN DEMAND...CAN PRODUCE...A WHIP-LIKE EFFECT UPSTREAM

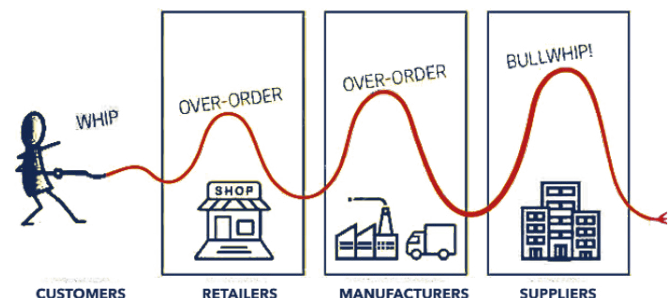


Figure 1: The bullwhip effect. (Source: DHL)<sup>1</sup>

In this context, the role of supply chain is crucial, and companies should consider to improve the whole supply chain. **Demand management will need to become more flexible and reliable** and to shift in response to changing impact across the supply ecosystem and related production allocation. Ensuring resiliency now for success in the future means that companies need to prepare overall value chain networks (demand, supply and production) **to balance reliability with respon-**



**siveness.** For this reason, future investments will be to build agility for volatile environments and to support digital capabilities.

In addition, companies should consider that **customer's behavior will continue to change.** Particularly, during lockdown for COVID-19 reasons, customers have increased their use of digital channel for the overall "journey". What was expected to happen in three years, happened in three months, the growth in online retail since COVID-19 start and the growth in "customer journey" made the new attitude of the consumers clear. This means rethinking how to connect with consumers for B2C companies, and how to change also the business relation, and related processes, in B2B context. **Customers** (from now with customers we include both end user consumers and B2B customers) **will probably buy through multiple channels,** partly as they diversify their supply bases so as to **maximize security of supply,** and partly as they make more use of online shopping so as to **minimize face-to-face exposure to potential wealth risk.** As consumers continue to "use" and "remain" digital, post-crisis expectations for digital experiences will continue to increase. Opportunities, users experience, and accountability will be table stakes. Based on the previous assumption, intelligence (in terms of customers' behaviors) and empathy will become the market position differentiators. Digital trust will be more critical than ever. Organizations need to prepare for the future of digital engagement versus digital transactions. The speed at which companies build and deploy these capabilities may become a source of competitive advantage and the degree to which they can sustain them may become a source of cost efficiency. Last, but not least, **visibility and analytics will be essential for companies to focus efforts,** drive scenario planning and rapidly respond to changing consumer demand. In this situation, some companies have launched new Analytics/Business Intelligence projects or have moved quickly to accelerate their digital transformation programs.

## OPPORTUNITIES & RECOMMENDATIONS

The actual market condition linked with the new customer behavior increase the **level of difficult to predict the long-term aggregate demand.** The next normal is likely to involve quite different patterns and priorities in what customers are demanding. In turn, industry will mirror those differences. Businesses, and their supply chains, will need to be agile and responsive. How? On one hand, companies need to improve and integrate their value chain processes, creating flexibility and adapting to this next normal, on the other hand, they need to reshape their internal operations, supporting the new way in which the sales teams will work.

**Rethinking the go-to-market models is now necessary and emphasis on customer experience is crucial.**

### A - Demand Management in the next normal

We are moving from an era marked by an emphasis on cost efficiency in the overall value chain, including demand management, to an era marked by an emphasis for resilience and partnerships. Companies need to implement a next-normal demand management model. Changes in consumer behavior, increased demand volatility from unpredictable events, and new norms will make market visibility essential. To excel in this constantly changing environment, companies need to develop a flexible organization with a digitally empowered and upskilled workforce. Encourage continuous innovation is also necessary.

To achieve this goal, companies should establish **a strong technology ecosystem,** including state-of-the-art digital platforms and infrastructures, collaboration models with an extended partner ecosystem to drive innovation in demand management. Next normal demand processes will be end-to-end connected and, where is possible self-orchestrated; all relevant internal functions and external partners will be integrated and connected using one **common data platform.** Data will be available continuously throughout the supply chain ecosystem, giving partners near-real-time and simultaneous access to relevant information and enabling



optimized and informed decision-making, leveraging also Artificial Intelligence solutions. Data transparency across this ecosystem allows for synchronized demand and supply planning, as well as connected and transparent logistics networks. Companies should also adjust ramp-up speed even on a daily basis, checking operations and supplier readiness as well as anticipating customer demand (see Figure 2).

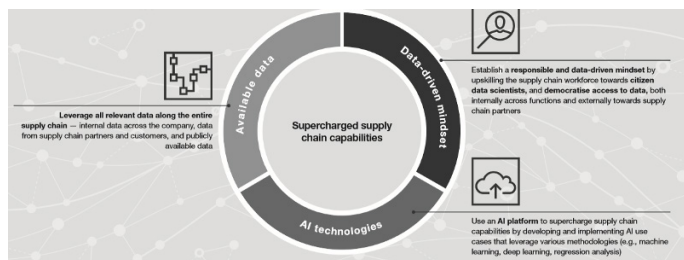


Figure 2: Overview of AI in the supply chain (Source: Elaborated by the authors)

In addition, companies should use **dynamic demand management segmentation** to be more **customer-centric** across multiple channels and optimize their cost-to-serve at the same time. Demand management segmentation is the design and operation of distinctly different end-to-end value chains, characterized by a whole range of potential attributes, from suppliers to customers (see Figure 3). Companies can use advanced AI tools to adjust and configure a higher number of **segments dynamically that allows to enhance both customer service and profitability**. For example, as demand for customized products increases, dynamic and AI-enabled demand management segmentation also helps companies juggle a greater number of increasingly granular value chain segments, each of which includes a highly diverse product portfolio.

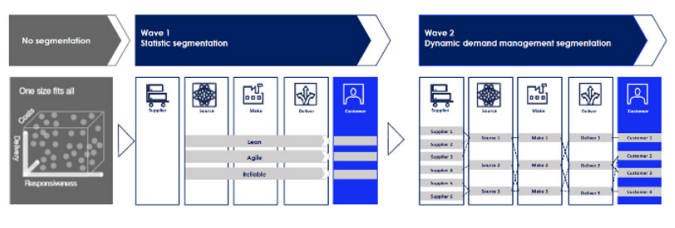


Figure 3: Evolution of demand management segmentation (Source: Elaborated by the authors)

To effectively get benefits, companies need to integrate data into the demand management data network. By recording a wider range of types of data on customer behavior in real-time and using machine learning to analyze patterns, forecasting is more predictive and accurate. In order to reach finally a demand sensing model.

**Supply chain becomes an integral part of business transformation** and a source of real competitive advantage (see Figure 4).

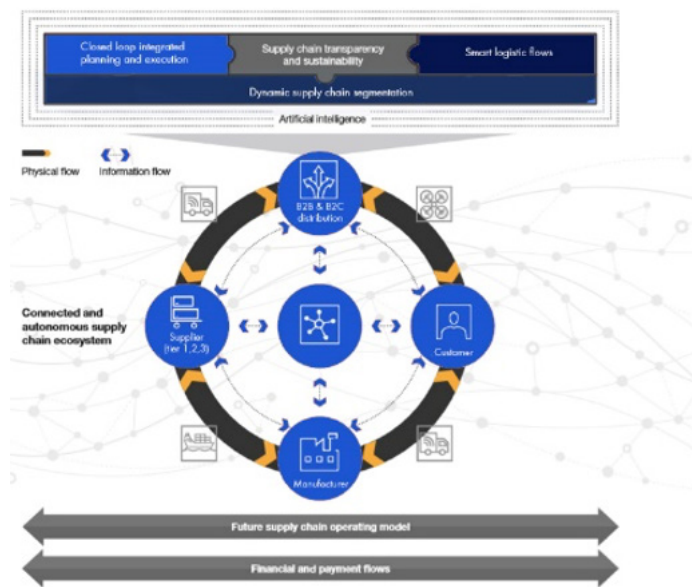


Figure 4: Overview of a connected and autonomous supply chain ecosystem (Source: Elaborated by the authors)

After establishing transparency along their end-to-end value chain, the next step is implementing **a closed-loop and integrated planning** (see Figure 5). Planning should be synchronized real-time with execution, integrate all the partners, and enable continuous optimization. Advanced planning makes operations more responsive, efficient, and integrated.





Figure 5: Overview of closed-loop integrated planning (Source: Elaborated by the authors)

These approaches include **integration** of **customer** and **supplier ecosystem data** into the **planning process** and integration of volume and financial data across the entire planning phase. Cross-functional long-term planning (integrated business planning) and collaboration required a direct link between the planning and the execution layers. These approaches are helping companies maintain a balance between demand and supply. Once companies achieve transparency over their supply chains, all planning activities, including production planning, capacity planning, inventory planning and distribution planning, can be connected to execution.



Figure 6: Example of Demand Planning Processes (Source: Elaborated by the authors)

When volume and financial forecasts are part of one integrated plan, operational information can help planners adjust strategic and tactical plans, for example, around seasonal promotions, sales growth and targets, or possible new locations. We suggest establishing and strengthening a **“control tower”** capability to guarantee the end-to-end control flow within the overall value chain.

## B - Rethink the go-to-market model

Considering the floating demand, the pathways for companies to respond vary from business to business, based on geographic area, industry, and size, among the other factors. However, the following elements could be considered the main pillars that are common for all companies.

### 1. Rediscover the customers and think about their prospects

The way how customer approaches procurement requirement is changing completely. In response, leaders are pioneering innovative ways of **managing customers’ needs and requirements** while reimagining the post-crisis future. Companies react proactively reaching out with empathetic, custom messaging and making concerted efforts to transform customer needs into value-driven solutions.

**How to react:** In this context, companies should rediscover their customers, meet their new needs and continuously delight them. It is necessary to create real-time **customer view:** sales managers have visibility and are engaged to monitor the seller activity. They should drive **proactive outreach** and **target the right customer with the right and tailored message.** They should also maintain consistency across marketing, service and channel partners using an effective blend of digital, virtual and in-person interactions. It is also necessary to align sellers with advanced origination skills to the most important prospect and customer relationships. Companies should **proactively solicit and analyze** feedback from customers and their go-to-market teams, measure the results and infuse their customer campaigns with insightful KPIs. They should **respond with agility**, executing changes based on the customer response by segment, industry and channel and choosing leads wisely.

It is also crucial to consider that **prospect customer now holds the key to company’s success.** For this reason, companies should know how prospect customer is faring in order to focus on the deals that will be probably won. It is also important to consider offering a temporary discount or deferred payment option; this will be worth for the long term prospect loyalty.



## 2. Rethink the business model closer the customers and rethink the sales workforce

Manufacturers are planning to **move their operations and rethink their business model closer to their customers**. Indirect channels are no more enough to meet customer needs. As with retailers, the distribution and wholesale channels will likely also struggle to manage inventory levels and the capability to release more confident available to promise (ATP) dates. Increasing dropship and inventory on demand capabilities will allow all companies to take direct control of the relationship, where is possible, **taking advantage of new distribution models**.

**Now is the time on demand management, to unlock the powerful potential of tech-driven marketing, sales, and service platforms.** These insight-driven automated innovations improve usability and deliver hyper-relevant insights to empower the sales teams to act swiftly on crucial opportunities. At the same time, they also **enable extended account teams and leadership to collaborate better together**.

**How to react:** Companies can protect their customer relationships by taking **end-to-end, clean-sheet views of their future value chains to secure competitiveness** managing in a new way market disintermediation where required by the business model.

Companies should ensure that the **commerce experience is more than a transaction engine for goods and services**: it needs to appropriately represent the brand position and what the company stands for as a business. Companies should establish a **responsive listening through omnichannel solutions**, analyzing customers' data, and increasing customers satisfaction by acting on real-time predictive information. Exploiting now this omnichannel approach, businesses will be able to adapt and connect activities to customers continuously. The companies should continually scan the horizon for **changes in demand management across relevant regions and/or local markets**, in order to be in the condition to respond on different customers' requirements in terms of products and related services, where the business justifies this approach.

Companies should also build creative cross-functional teams to pioneer new service offerings and enhance-

ments; embrace an agile innovate-test-learn-refine approach. They should **create customized commercial teams**, made up by sellers, negotiators, and finance specialists to govern critical deal terms, managing the exposure, targeting commercial interventions, anticipating new commercial realities, developing scenarios planning. Companies should create **true customer visibility**, designating their marketing, sales, and service platforms as a combined single source of market demand. Employing a range of **digital and analytics solutions**, including Industry 4.0 solutions can help to achieve this objective. They should also guide the salesforce, embedding AI capabilities in their sales platform to focus their sales teams on higher probability, higher value opportunities in markets that are demonstrating early crisis recovery. In addition, they should **equip sales teams with a dynamic dashboard and with smarter tools**. This will help them seize opportunities at the right moment, simplifying the digital experience, enabling seamless data capture and increasing quality. It is also important to structure leadership oversight to drive outcomes from enhanced visibility, collaboration and reporting cadence.

The focus moving forward must be on **building an adaptive, future-ready workforce and culture**.

## 3. Reshape the go-to-market models and exploit digital channel

In this dynamic context, several opportunities are emerging, including new **go-to-market models** that increase the importance of digital and remote sales. This sudden **usage of digital channels, including e-commerce platforms**, must be supported, especially because the shift from in-person sales could be permanent. In the next normal the ability to create **tailored pricing strategies** for each customer and an **agile approach will be crucial**.

Also, **researching suppliers is increasingly realized through digital channels**: web sites of suppliers, online materials from them, and live chats were rated the most valuable resources.

The majority of companies known the importance of digital channels and stated that they were somewhat or very likely to **sustain the changes for 12 months or**



**longer** (see Figure 7). If this holds true, companies will resolve to embed digital and remote sales options along the entire customer decision journey.

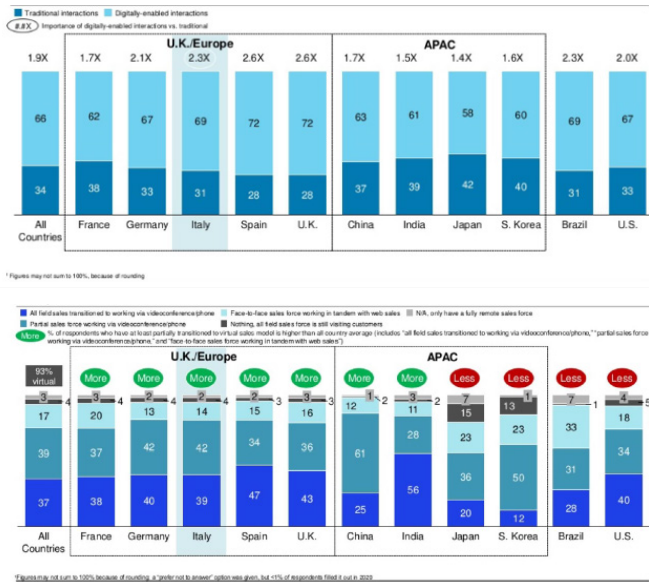


Figure 7: Transition to virtual sales model and importance of digital. (Source: McKinsey)<sup>2</sup>.

**How to react:** Digital commerce has not been a primary driver of business and many companies are realizing that their digital channels and platforms are not equipped for facing the changes in demand. They need to **build a scalable digital commerce presence**, to sustain their capability to know the market requirements. Although each company must develop a go-to-market model unique to its circumstances and customer base, **a strong approach to improve digital and remote sales will typically include the following steps:**

- **Analyze:** Companies should conduct a **fact-based customer segmentation** that considers economics and preferences within each group. Companies should establish a **“Commerce Control Tower”** and conduct a Marketing ROI assessment to optimize channel mix and redeploy investments.
- **Project:** In this phase, companies define the **right go-to-market model for each segment**. The model should consider direct channels and indirect channels, **building omnichannel and**
- **ecommerce capabilities to defend and extend market share.** Companies must also map employees to new roles and determine their territories,

account coverage, and revenue goals. In tandem, **they should ensure that their performance-management approach, organizational capabilities, systems, and tools are appropriate.** It is crucial to **re-establish demand visibilities and KPIs;** this will allow teams to focus on the more immediate and critical bottlenecks.

- **Implement:** On one hand, communication to all key workforce about changes in roles, accounts and KPIs is very important. On the other hand, companies need also to communicate changes to customers and create transition plans. Only after having realized these activities, the new go-to-market model should be scale up.
- **Maintain:** Companies should regularly check in with customers to ensure that they have a **quality experience** during the transition. Adherence to the new model and strong performance management are crucial. A lot of surveys published highlight that **Digital Customer Experience is one of the key themes that executives are likely to pursue long term (2021+)** (see Figure 8). Digital Customer Experience means leveraging technology to improve the way businesses engage, transact with and support customers and influencers both pre- and post-transaction. As shown in the chart, across five key industrial subsectors, 38% managers are planning to increase their investments in digital customer experience.

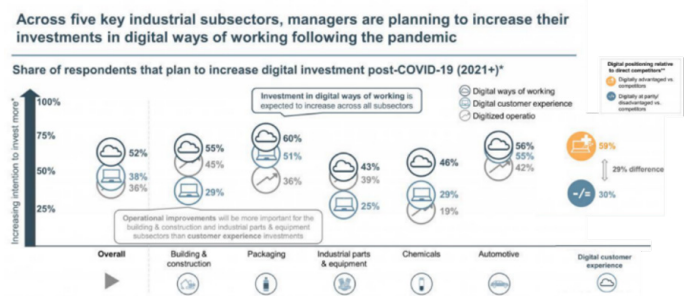


Figure 8: Respondents that plan to increase digital investment post-COVID-19 (2021+) (Source: LEK)<sup>3</sup>





## CONCLUSIONS

The need of adapting to the changes is characterizing the post-pandemic world. The demand is more dynamic, the behavior and the needs of the costumers are different. To face these challenges, manufacturers should create end-to-end visibility along the whole value chain and understand the real preferences of the customers.

Therefore, **next normal demand management should be flexible and resilient**; an ecosystem data platform will standardize and integrate data coming from different sources, giving visibility, and allowing to create a structured business ecosystem. In this context, it will be possible to exploit AI solutions that increase transparency, improve planning, and enhance logistics flows also to protect climate change. Dynamic demand management segmentation allows to enhance customer services and to make the company more customer centric. In this way, **forecasting can become more accurate and predictive and supply chain could be considered as a real source of competitive advantage**. Demand planning and management will be clearly optimized.

Companies should also create **an omnichannel approach which allows to be closer to the customers**, to better understand their needs and requirements in terms of products and related services and then, to personalize the messages and the offerings. The sales workforce and the whole ecosystem should collaborate, and they should be provided with dynamic dashboards and smart tools improving the visibility. **Appropriate KPI and feedback analysis** are key factors for companies. Building **an adaptive, future-ready workforce and culture** will be necessary. In reconfiguring and extending products, services, partnerships, and ecosystems, businesses which have already invested in digital commerce sales tools will likely have strong advantages. **New go-to-market models allow the explosion of digital channels, including e-commerce platforms**. These channels lead to tailored pricing strategies for each customer and to an agile approach that accelerate product innovation. In COVID-19 period was touched the importance of these news digital tools for supporting digital experience and for improving digital engagement. A **fact-based customer segmentation**, establi-

shed through the exploitation of the commerce control tower, is the first step to exploit digital tools in serving the demand. **Choosing the appropriate go-to-market approach for each segment** and exploiting omnichannel strategies strengthen the ability of the company in managing the next normal demand. Deeper **focus on digital customer experience** makes clear one time more that commerce experience is more than a transaction engine for goods and services.

In the end, companies should understand **the changes in customers' behavior and fluctuations of the demand**, in order to serve customers better than competitors, ensuring sales and future loyalty. Visibility and integration along the whole supply chain allow to anticipate customers' requires and potential changes; digital channels, AI solutions, commerce control tower and omnichannel approaches allow to customize the offerings and to serve the customers with the right products or services, in the right moment and in the right way, increasing their customer experience.



## ENDNOTES

<sup>1</sup>DHL, (2020). Post-Coronavirus Supply Chain Recovery. The Journey Toward the new Normal. Retrieved from: <https://www.dhl.com/content/dam/dhl/global/core/documents/pdf/glo-core-post-covid-eme-white-paper.pdf>

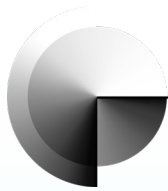
<sup>2</sup>McKinsey, (2020). How B2B decision makers are responding to the coronavirus crisis. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/how-b2b-decision-makers-are-responding-to-the-coronavirus-crisis>

<sup>3</sup>L.E.K. (2020). COVID-19 and the Growing Digital Divide in Industrials. Data trust pulse survey. Retrieved from: <https://www.lek.com/insights/covid-19-and-growing-digital-divide-industrials>



This white paper, published in November 2020, is part of the Back to the Future: Manufacturing Beyond Covid-19, an initiative by the World Manufacturing Foundation, aimed at analysing the impacts of the Covid-19 pandemic on the manufacturing sector and outlining key findings for a resilient manufacturing sector in the new normal.

For more information on the project and to read other topic-focused white papers that are part of the initiative, visit <https://worldmanufacturing.org/report/whitepaper-back-to-the-future/>



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