



Opening Up America – The White House, in conjunction with the CDC, released guidelines for a three-phased approach to reopen the economy. <https://www.whitehouse.gov/openingamerica/>

Site Operations & Access

- Accelerated push towards automation technology that allows industrial operations and production to continue with less human interaction
- More businesses are taking steps to re-open, including discussions on staff augmentation, increasing production, and shifting protocols
- Manufacturers are streamlining operations, focusing production on high-volume, high-moving items to become more efficient.
- Concerns over continuity of direct and indirect materials supply, including mission-critical spares and PPE
- Enhanced safety protocols the new normal, increasing PPE supply chain strain as questions arise around who needs masks, gloves, glasses and how many, considering shelf life
- Trend towards reshoring production is accelerating, getting closer to the end user, to minimize future supply chain risk

Logistics & Last Yard Delivery

- Small trucking carriers with limited access to credit are struggling from lack of demand in shipping markets disrupted by lockdowns on economic activity meant to control the spread of COVID-19

- Logistics capacity is growing more and more constrained as consumers and businesses (essential) shift to e-commerce
- UPS, designated among the government's critical infrastructure, while continuing operations suspends service guarantee for all shipments from any origin to any destination
- Amazon allows sellers to start shipping nonessential items again
- Receiving at sites and proof of delivery (POD) not required during contactless delivery. Items misplaced or lost at the dock, not making their way to the storeroom or to where they are needed

MRO Demand —Maintenance & Engineering

- U.S. manufacturers currently make approximately 50 million N95 respirators each month, with projections estimating an increase to 80 million per month by June, while HHS estimated demand from health-care workers alone at 300 million each month.
- Staggered shifts to ensure compliance with social distancing rules
- Production assets of essential industries are maxed out and fatigue stress is growing
- Limited visibility into future repair demand



Emerging Lessons Learned

- Acceleration of Industry 4.0 technologies to mitigate risk of future pandemics on plant operations and production
- MRO supply chain status is quickly evolving to essential and, in many cases, mission critical
- Organizations need a more deliberate approach to managing their PPE and essential supplies
- Companies need a better grasp on their tailspend, as an extended tail creates additional risk in the reliability of the supply chain
- Companies need to reconsider their inventory and safety stock, resetting replenishment points and re-evaluating min/max triggers, especially as lean/just-in-time inventories have proven to be a risk multiplier
- Most firms have no risk management plan related to MRO supply chain; it is often overlooked/ignored in enterprise-wide risk management

- Organizations consider value-added services such as kitting and delivery to reduce need for maintenance window transactions
- Inventory set levels (Min/Max) – replenishment misaligned with current demand and actual inventory levels
- Global supply chains coupled with Just-in-Time inventory delivery is proving challenging
- Unmanned, unsecured storerooms leading to disorganization, resulting in greater difficulty locating parts...more spot buys and expediting
- Supplier-managed free stock and vending replenishment programs strained due to site access restrictions

Suppliers – OEM, Distributors, Marketplaces

- Lead times are increasing, in some cases as much as 200% or more as many MRO products and components are sourced from Asia
- In a recent [MDM/Baird survey](#), some distributors were forecasting a 20% or greater decline in demand
- Supplier customer service is stretched very thin as resources are limited
- RMA's (return materials authorizations "returns") are increasingly difficult or nonexistent – focused on responding to immediate needs
- Distributors are focused on PPE demand at the expense of the other categories leading to missed delivery dates, etc.

Fulfillment – Storeroom & Inventory Management

- Companies consider guidelines on safe work practices in the storeroom, including recommended PPE and walk-up window protocols to continue to ensure employee safety as production ramps up and businesses start to reopen
- Organizations with enterprise visibility of inventory are able to share supplies, particularly critical spares which may not be available otherwise
- Interest in a central stores model will grow as awareness of expanding scope of essential supplies and materials impacts enterprise risk management plans



- Pricing – increased competition for less demand is driving pricing down in most categories (with the exception of PPE and other critical categories)
- Cash-Flow Concerns are on the Rise — Especially as payment terms are extended unilaterally, pushing smaller distributors and specialty manufacturers into financial jeopardy
- Multiple categories where sources are located in Asia and Europe are being impacted today and will continue to be for months to come as many plants have been, and continue to be, shut down or are producing at less than 100%
- MRO supply chains are likely to experience bull whip effects in mid-summer once domestic inventories are depleted and usage returns to normal
- Suppliers are significantly reducing credit limits to force pre-payments or quick turn around payments, at the same time buyers are extending their pay terms
- Visibility into (OEM) supply chain and timing for delivery is limited as information is not readily available or reliable, particularly from international suppliers
- Systems limitations cloud visibility into critical supply chain information including storeroom/warehouse/free stock inventory levels
- Limited to no knowledge of “critical” spares, inventory levels in house and with suppliers, country of origin, and or lead times
- The FDA has approved several technologies and organizations for mask sterilization and reuse – this will take on greater importance in the future

Mitigation Strategies

- Analyze 12-36 months of spend data, bucketing into categories to gain perspective into trends. This allows you to ask specific questions as to who your top PPE providers are, identify secondary and tertiary suppliers for critical categories like sanitation/janitorial suppliers, and ask which suppliers you have negotiated contracts with.
- Re-define critical, identify critical spares, on-hand inventory, and reconsider minimum set points
- Organizations can use analysis on their spend profiles to predict what they will use in the coming 12 months and plan for supply continuity.
- Consider capital projects to retrofit equipment and reduce reliance on customized critical parts (with long lead times). Use of interchangeable, off-the-shelf parts will mean less impact from supply disruption and ability to share limited inventories across facility locations

Supply Continuity – Sourcing & Procurement

- Primary focus is continuity of supply, dealing with primary, secondary, and tertiary sources of supply including many non-traditional sources such as marketplaces, while corrupt (MRO) parts data severely limits Sourcing’s ability to quickly identify functional equivalents from alternate suppliers

About SDI

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