



# Advanced Manufacturing Quarterly

Analyst themes from earnings calls

June 2021

Advanced manufacturing (AM) companies are transforming themselves into future-ready enterprises amid growing sources of disruption. While demand in key regions and end-markets continue to recover, supply chain disruptions and rising raw material prices are eroding margins. Although accelerated digitalization is likely to provide resiliency in operations, companies are actively looking to create long-term value by capturing new sources of revenue and gaining customer trust through the launch of sustainable offerings.

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## Manufacturers prepare for end-market recovery by transforming themselves into future-ready connected and sustainable enterprises

Welcome to the quarterly review of key themes discussed by leaders of 31 AM sector companies (including those from the aerospace and defense (A&D), industrial products (IP), and chemical subsectors) during public earnings calls with analysts in April and May 2021.

Starting this quarter, we have separated the top 10 themes into “market forces” and “company responses” to separate change drivers from strategic initiatives. A market force is a trigger event or a driver of change that includes political, economic, competitive, social, technological, legal and environmental factors. A company response is a company action or strategy in response to a market force(s) that can help achieve the next level of growth and mitigate risks. This edition tracks movement of the top five market forces and company responses from quarter to quarter to provide a perspective on shifts in the AM landscape.

### Market forces and company responses that stood out include the following:

- ▶ **Sustainability initiatives.** Sustainability has emerged as a major market force, rising on the corporate agenda over the past few quarters. Companies are making sustainability a core part of their business strategy as they recognize the opportunity for tremendous value creation via sustainable offerings and supply chains. These include new service-driven revenue streams, creating markets for new products and gaining customer trust by becoming a responsible enterprise.
- ▶ **Product design and innovation.** Companies are realizing that the time to innovate is now and are resorting to digital measures to safeguard business continuity and develop resilient business models that will allow them to sustain growth in the “new normal” environment. Hence, to become future-ready connected enterprises, companies are undertaking multimillion-dollar digital investments, increasing share of high-margin digital offerings and connecting their installed base to create differentiated solutions.

**Jerry Gootee**  
EY Global Advanced Manufacturing Sector Leader

## Top five market forces

1Q21		
↔	1.	Demand patterns
↔	2.	Public health
↑	3.	Sustainability initiatives
New	4.	Intensity of competitive rivalry
New	5.	Consumption behavior

4Q20		
	1.	Demand patterns
	2.	Public health
	3.	Investors' expectations for improved returns
	4.	Sustainability initiatives
	5.	Operating costs

### 1 ↔ Demand patterns

Trends in key customer segments impacting demand for products and services

- ▶ Key end markets are recovering and companies expect double-digit growth across packaging, infrastructure, mobility, consumer durables, industrials, as well as home and personal care.
- ▶ A few regions such as Asia (primarily China), North America and the Middle East witnessed strong momentum; however, demand was muted in many regions such as Europe (UK, Germany), Latin America and Asia (primarily India) as restrictions were imposed owing to the emergence of new COVID-19 variants.
- ▶ Demand from customers in commercial aerospace remained low and is likely to be subdued in the short term, with recovery expected in the long term.

### 3 ↑ Sustainability initiatives

Sustainable product and operations, decarbonization, and circular economy

- ▶ Stricter emission regulations and a shift in customer attitude toward sustainable products are making manufacturers realize the tremendous value that a sustainable enterprise can generate, via new service-driven revenue opportunities, establishing markets for new products and becoming a responsible enterprise.
- ▶ Industrial peers are launching sustainability-driven outcome-based solutions that rigorously track various sustainability metrics for buildings, factories and products, along with tracking outcomes such as reduction in energy, greenhouse emissions and water usage. One peer also set robust decarbonization targets for 2030.
- ▶ Chemical peers are introducing sustainable packaging solutions and collaborating with organizations focused on reducing plastic waste and converting plastics back to oils, while aerospace peers are focusing on developing more efficient aircraft.

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Supply chain sustainability can no longer be ignored. It's a business responsibility and an opportunity. Leading companies recognize this and are building sustainability into each supply chain competency area to secure long-term value for their organization.

Debi Affinito, EY Consulting US-Central Supply Chain and Operations, EY Americas Smart Factory GTM Leader

### 2 ↔ Public health

The COVID-19 pandemic

- ▶ The recent surge in COVID-19 cases during the second wave in certain regions has increased uncertainty for a number of sectors, leading to disruptions in supply chain and production rates.
- ▶ Companies are continuously monitoring the situation to respond to these challenges, with a few of them planning temporary production stops, while others are closely tracking their supply chains.
- ▶ Several are also planning for recovery in end markets by hiring additional manpower and investing in resources to increase production.

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Following the COVID-19 pandemic, your business needs to be equipped for the now, next and beyond. Taking immediate steps to safeguard business continuity and initiate crisis planning while developing a resilient enterprise going forward will allow manufacturers to reframe their future, operate a “new normal” and transform to succeed. The time to innovate is now.

Sachin Lulla, EY Advanced Manufacturing & Mobility, Global Digital Strategy & Transformation Leader





## 4 **New** Intensity of competitive rivalry

Competitive threats, changes in competitive landscape and pricing pressures

- ▶ Many peers are witnessing a challenging pricing environment owing to rising raw material prices, commodity price volatility, semiconductor and plastic resin shortages, and technology costs.
- ▶ Peers also lost millions of dollars in margins due to supply chain disruptions caused by the Suez Canal blockade, storms and continued COVID-19 challenges.

## 5 **New** Consumption behavior

Attitude toward green products, digital technology adoption, and disruption in consumption patterns

- ▶ The sector is witnessing an increasing adoption of digital technologies, expedited by the pandemic, to create differentiated solutions that support changing business models.
- ▶ Customer preference for online and ecommerce platforms, coupled with productivity benefits of digital tools, are also driving the shift toward online consumption.
- ▶ Customer demand for energy efficient and sustainable products is rising as they look to meet their decarbonization targets.

### Top five company responses

1Q21		
↑	1.	Competitive positioning
↔	2.	Business reorganization or restructuring
↓	3.	Change in financial outlook
↔	4.	Product design and innovation
<b>New</b>	5.	Working capital and cash flow management

4Q20		
	1.	Change in financial outlook
	2.	Business reorganization or restructuring
	3.	Competitive positioning
	4.	Product design and innovation
	5.	Financial and capital strategy

## 1 **↑** Competitive positioning

Market share, new division and brand launches, pricing strategy, and speed to market

- ▶ AM peers are closely monitoring and evaluating their product pricing strategy to account for rising costs, and many are increasing product prices to maintain margins.
- ▶ Many peers are also making use of digital tools, such as predictive analytics, to minimize pricing disruptions.
- ▶ Despite supply chain disruptions, peers are prioritizing order fulfillment by incurring additional logistics costs to strengthen customer relationships and gain a competitive edge.

## 3 **↓** Change in financial outlook

Changing forecasts for revenues or earnings per share

- ▶ Most companies are continuing to provide cautious positive outlooks and expecting sales to grow in the high single digits for 2021, driven by recovery in end markets and higher uptake of digital services.
- ▶ Margins are likely to be driven higher by the absence of COVID-19 related charges, improving performance and benefits from continued business transformation activities.
- ▶ Peers with high exposure to COVID-19-centered products such as personal protective equipment (PPE), testing kits, sanitizers and vaccine supplies are witnessing strong revenue tailwinds, with YoY growth rates as high as 100%.

## 2 **↔** Business reorganization or restructuring

Transforming company structures to meet strategic goals and market demands

- ▶ Some of the cost reduction programs implemented during 2020 became permanent reductions, while other spending categories, such as business travel, payroll increases and organic investments, were reinstated and are providing headwinds.
- ▶ Restructuring plans to improve labor productivity, digitize supply chain and standardize practices, including IT systems across the organization, are expected to improve margins.
- ▶ Several companies are simplifying organization structures by divesting non-core businesses and continued to decentralize business units to improve accountability and ownership.
- ▶ Many peers are undertaking acquisitions and investing heavily in expanding capacities that will cater to potential demand in the coming years.



## 4 Product design and innovation

New products and services influenced by sustainability and digitalization of offerings

- ▶ Peers are connecting their installed base to IoT platforms and launching high-margin connected offerings for HVAC systems, smart buildings and elevators, helping them increase customer connectivity and improve margins.
- ▶ Companies are developing more energy-efficient, sustainable and connected products, such as energy-efficient aircraft and net-zero-connected buildings, to help customers meet decarbonization targets.
- ▶ To capitalize on the trends of automation in the B2B market, one industrial peer launched an advanced cobot with higher payload and speed, while another peer launched a smart face mask with microphone and Bluetooth connectivity to tap the B2C market.

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Companies are jumping in to quickly prove AI, machine learning, Internet of Things, 3D printing and other emerging technologies without stepping back and thinking about how they impact the broader organization. There is a need to link the digital transformation program with the operational excellence program and invest in training, enablement and the building of a culture of learning and collaboration.

Himanshu Khandelwal, EY US Advanced Manufacturing & Mobility, Digital Strategy & Transformation Leader

## 5 Working capital and cash flow management

Changes observed from the prior quarter

- ▶ Debt reductions during the quarter are helping companies improve cash flow and working capital levels. However, a few witnessed working capital headwinds due to higher account receivables in line with higher sales.
- ▶ Few peers, especially in chemicals, with exposure to the automotive industry expect global semiconductor and resin shortage to endure through 2021, significantly impacting working capital and cash flows.
- ▶ Aerospace OEMs are enhancing liquidity by collecting customer advances and building a robust order book.

### Companies included in the analysis

The identification of the top market forces and company responses is based solely on an examination of earnings calls held in April and May 2021.

- |                              |  |  |                                     |
|------------------------------|--|--|-------------------------------------|
| ▶ ABB Ltd.                   | ▶ Ecolab Inc.                              | ▶ Mitsubishi Chemical Holdings Corporation | ▶ Raytheon Technologies Corporation |
| ▶ Airbus SE                  | ▶ Flowserve Corporation                    | ▶ Northrop Grumman Corporation             | ▶ Siemens AG                        |
| ▶ Albemarle Corporation      | ▶ FMC Corporation                          | ▶ Olin Corporation                         | ▶ Textron Inc.                      |
| ▶ BASF SE                    | ▶ General Electric Company                 | ▶ Otis Worldwide Corporation               | ▶ The 3M Company                    |
| ▶ Boeing Company             | ▶ Honeywell International, Inc.            | ▶ PPG Industries, Inc.                     |                                     |
| ▶ Bombardier Inc.            | ▶ International Flavors & Fragrances, Inc. |  |                                     |
| ▶ Carrier Global Corporation | ▶ International Paper Company              |  |                                     |
| ▶ Danaher Corporation        | ▶ Johnson Controls International plc       |  |                                     |
| ▶ Dow Inc.                   | ▶ Linde plc                                |  |                                     |
| ▶ Dupont De Nemours, Inc.    | ▶ Lockheed Martin Corporation              |  |                                     |
| ▶ Eaton Corporation plc      | ▶ LyondellBasell Industries NV             |  |                                     |

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