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Advanced Manufacturing Quarterly

Analyst themes from 4Q18 earnings calls

Competitors respond to market forces with a greater focus on customer

Conversations about growth on AM 4Q18 earnings calls focused on geographic and subsector trends. Leaders maintained an optimistic view on growth overall, tempered by local shifts in demand and trade policy issues. A customer-centric mindset is guiding increased investments in R&D across the sector as well as realignments in operations for some peers. AM peers continue to focus on core operations through internal transformations and divestitures.

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Welcome to the quarterly review of the top themes discussed by leaders of 20 advanced manufacturing (AM) sector companies (including those from the aerospace and defense, industrial manufacturing, and chemicals sectors) during public earnings calls with analysts. This update tracks the movement of these themes from quarter to quarter to provide perspective on shifts in the AM landscape.




Themes that stood out in 4Q18 include:

- ▶ **Geographic developments**, which moved up from No. 4 in 3Q18 to the No. 1 theme this quarter. Several leaders are reporting continued strong results in Asia but noted slowdowns in demand in key customer segments such as automotive and consumer electronics. In North America and Europe, aerospace and defense (A&D) and industrial products (IP) peers were most optimistic about growth prospects, while chemicals peers continued to look primarily to Asia for growth. Trade policy issues are influencing discussions about regional performance.
- ▶ **Innovation and new product/service launches**, which returned to the list at No. 5. Increased financial commitments to R&D are supporting pipelines of new products and services. Executives are positioning these investments as points of distinction on which peers can be benchmarked against leading companies. As digital technology continues to drive many new offerings, some peers are bringing digital operations together within their companies to benefit from shared resources and to pursue a more unified approach to product and service development.
- ▶ **Business reorganization/restructuring**, which rose from No. 10 in 3Q18 to No. 7 this quarter. The establishment of deeper connections with stakeholders, including customers and investors, is leading business unit realignments at some peers. Some corporate functions are being moved from centralized operations into business units to increase financial transparency and encourage an entrepreneurial mindset. Divestitures still play an important role as peers continue their focus on core operations and strive to build leaner, higher-margin operations overall.

Jerry Gootee

EY Americas Advanced Manufacturing Advisory Leader

Top 10 themes from quarterly earnings calls

4Q18			3Q18	
	1.	Geographic developments	1.	Working capital and cash flow management
	2.	Financial initiatives	2.	Geopolitical environment
	3.	Developments in end markets	3.	Competitive environment
	4.	Working capital and cash flow management	4.	Geographic developments
	5.	Innovation and new product/service launches	5.	Developments in end markets
	6.	Cost reduction	6.	Change in financial outlook
	7.	Business reorganization/restructuring	7.	Currency impact/foreign exchange volatility
	8.	Critical projects	8.	Financial initiatives
	9.	Geopolitical environment	9.	Supply chain management
	10.	Competitive environment	10.	Business reorganization/restructuring

Key themes

1 Geographic developments



Market conditions by region

- ▶ All subsectors continue to cite the Asia-Pacific region as growing most rapidly.
- ▶ China continues to lead demand growth for many products. However, slowing growth was also noted by peers, particularly in the automotive and consumer electronics sectors.
- ▶ Industrial products peers are more confident than chemicals peers about growth in China.
- ▶ Chemicals peers note customer uncertainty created by trade policy discussions between China and the US.
- ▶ Revenue growth in Europe and North America has been strongest for A&D peers.
- ▶ Industrial products peers had mixed results in Europe and generally positive results in North America.

2 Financial initiatives



Capital management and development

- ▶ Share buyback activity accelerated for many peers in late 2018 because of unexpected drops in stock prices. Some peers engaged in buyback programs of US\$5b or more for the year.
- ▶ Dividend commitments, including plans for increasing payouts, continued.
- ▶ Capital expenditures were increased to support future growth.



In a recent EY survey of CFOs, only 9% of manufacturing CFOs say that their primary motivation for buying back company shares was that the business was undervalued in the market. Conversely, manufacturing CFOs are more likely to say they repurchased shares to fulfill shareholder or analyst expectations (37%). If the company is not undervalued, it needs to question whether repurchasing shares is the best use of capital or if other investments will generate a higher long-term return.

David Gale, EY Global Advanced Manufacturing Transactions Leader

3 Developments in end markets



Trends in key customer segments impacting demands for products and services

- ▶ Optimism is supported by growth across multiple industrial markets, led by A&D.
- ▶ Strong growth in air traffic and high load factors are continuing to drive demand for commercial aircraft.
- ▶ Demand for military equipment is continuing to rise as defense budgets in many countries expand.
- ▶ Automotive customers are reducing orders because of end-market softness.
- ▶ Demand is increasing for advanced materials used in nonresidential construction, particularly in smart cities and infrastructure modernization.
- ▶ Spending by oil and gas customers returned to more conservative levels because of oil price volatility in late 2018.
- ▶ More than one peer cited the strength of a diversified product portfolio as a hedge against market volatility in individual customer segments.

4

Working capital and cash flow management

Changes observed from the prior quarter

- ▶ Cash flow continues to improve because of a strong prioritization of working capital discipline, often supported by productivity and cost-control programs.
- ▶ Increased pension plan contributions create a drag on cash flows for some peers.
- ▶ Working capital has been challenged by rising inventory levels for some peers. A chemicals peer has increased production in response to a volatile global trade environment. Other peers in chemicals and industrial products are experiencing unplanned high inventory levels.
- ▶ One industrial peer has restructured an incentive program to encourage executives to take measures to improve working capital throughout the year, not only in 4Q.

5

New

Innovation and new product/service launches

Focus on digital technologies, R&D and product innovation

- ▶ Partnerships are fostering innovation, whether with clients to produce highly customized offerings or with third parties to develop and commercialize new technologies.
- ▶ Across all subsectors, several peers are increasing R&D budgets and benchmarking their investments against those of recognized industry leaders.
- ▶ Rather than centralizing R&D investments, some peers are allocating resources to specific business units and product lines to give business unit leaders more autonomy and to better assess returns on investment.
- ▶ At the same time, some industrial products peers are reorganizing their digital offerings into single business units within the company to support enterprise-wide collaboration.
- ▶ The focus on digital and analytics, for internal operations and for product and service offerings, continues to strengthen. Examples of analytics-driven solutions include crew management systems for airlines and energy efficiency for commercial facilities.
- ▶ The Internet of Things (IoT) continues to be a driver for the creation of connected solutions such as building management systems and satellite networks.

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A digital transformation is a holistic approach to changing and modifying the current business model. Digital technology drives a new way of setting up the business and combines it with new platforms and ecosystems to play a different game. In order for chemicals companies to implement a successful digital transformation process, it must be driven from the C-suite, with the chief executive leading the way. It is imperative to avoid delegating this task to other individuals, such as the chief digital officer or IT department.

Frank Jenner, EY Global Chemical Industry Leader

6

New

Cost reduction

Focus on controlling costs in all parts of the organization

- ▶ Centralized business functions continue to be streamlined by peers across all sectors, both in terms of headcount and departmental structure. Corporate overhead is being reduced wherever possible.
- ▶ Peers are reassigning corporate functions to individual business units to support increased agility and greater levels of transparency into operating costs.
- ▶ Multiphase productivity programs continue to deliver results. Chemicals peers reported accelerations in time frames or increased financial goals for their programs. One peer indicated plans to defer discretionary spending in the short term.
- ▶ Industrial products peers are examining recent M&A transactions for additional cost synergy opportunities.
- ▶ A&D peers are partnering with major customers to identify opportunities to maintain quality while lowering costs and price.

7

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Business reorganization/restructuring

Operational streamlining, business function reorganization and divestments

- ▶ Internal structures are being simplified to better support customer relationships. One peer is eliminating a matrix-based structure to provide greater flexibility in responding to customer needs. Another peer has reorganized a business line so that customers are served by a single service group with experienced sales staff.
- ▶ Manufacturers continue to reorganize portfolios through spin-offs, acquisitions and divestments to achieve a more focused business structure.
- ▶ Business segments are being realigned to correspond more closely with customer segments. One peer is reorganizing into segments intended to communicate value more clearly to investors.
- ▶ Digital services across an organization are being managed by a single group or business unit at some peers. This structure supports stronger coordination of digital service development and delivery.

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The advanced manufacturing industry faces an immediate and unavoidable challenge: change the business model to embrace new technologies and service offerings or risk a steady decline in growth. Investors are scrutinizing old business models and demanding new sources of value. Companies in the sector need to adjust their thinking to take advantage of the opportunities offered by technology. Divestment will continue to be a fundamental part of this process.

David Gale, EY Global Advanced Manufacturing Transactions Leader

8

New

Critical projects

Production updates and milestones for key projects crucial to company strategy

- ▶ Significant new government contracts have been announced by A&D peers.
- ▶ A&D peers are adjusting production rates and ramp-up plans as key projects transition from development to delivery phase. One peer is facing delivery challenges as production facilities are operating near capacity.
- ▶ Chemicals companies are benefiting from new facilities coming online, particularly those based in the US and well-positioned to take advantage of low-priced feedstocks.
- ▶ Customer orders are growing for industrial products peers. One peer reports smaller order sizes by revenue but higher margins on booked orders.

9



Geopolitical environment

Effects of government policies and trade flow on industrial revenues and margins

- ▶ While a few peers have documented the impact of tariffs on 4Q18 results, most comments about geopolitical issues have been focused on potential scenarios in 2019.
- ▶ Leaders are noting uncertainty from customers stemming from unresolved trade policy issues and the partial US Government shutdown in early 2019. One industrial products peer has observed a change in tone among customers to one of lower confidence from early 2018 to 2019.
- ▶ Some peers have adjusted 2019 financial forecasts to reflect the possibility of lower order volume if customer uncertainty continues.
- ▶ Actions such as supply chain adjustments are being planned to manage the financial impact of tariffs.
- ▶ Brexit has been a topic on calls for peers across AM. One chemicals peer acknowledged the possibility of supply chain disruptions if trade policy issues are not fully resolved by the deadline.

10



Competitive environment

Pricing, market share and changes in business models

- ▶ Peers are increasing prices in response to higher raw materials costs and tariff impacts.
- ▶ Premium products based on innovative technologies are best positioned to maintain market share in spite of increased prices.
- ▶ Expansions of service portfolios, ranging from post-purchase maintenance contracts to business consulting, are providing manufacturers with ways to deepen customer relationships and ensure future revenue streams.
- ▶ Pricing flexibility varies by customer segment and geography. Some peers have experienced challenges in raising prices in Asia and Europe due to local economic growth trends, especially in sectors such as automotive and lighting.

Companies included in our analysis

- ▶ ABB Ltd.
- ▶ Airbus SE
- ▶ Akzo Nobel NV
- ▶ BASF SE
- ▶ Boeing Company
- ▶ Bombardier, Inc.
- ▶ Danaher Corporation
- ▶ DowDuPont, Inc.
- ▶ Eaton Corporation plc
- ▶ Flowserve Corporation
- ▶ FMC Corporation
- ▶ General Dynamics Corporation
- ▶ General Electric Company
- ▶ Honeywell International, Inc.
- ▶ Johnson Controls International plc
- ▶ Lockheed Martin Corporation
- ▶ Raytheon Company
- ▶ Siemens AG
- ▶ Solvay SA
- ▶ United Technologies Corporation

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