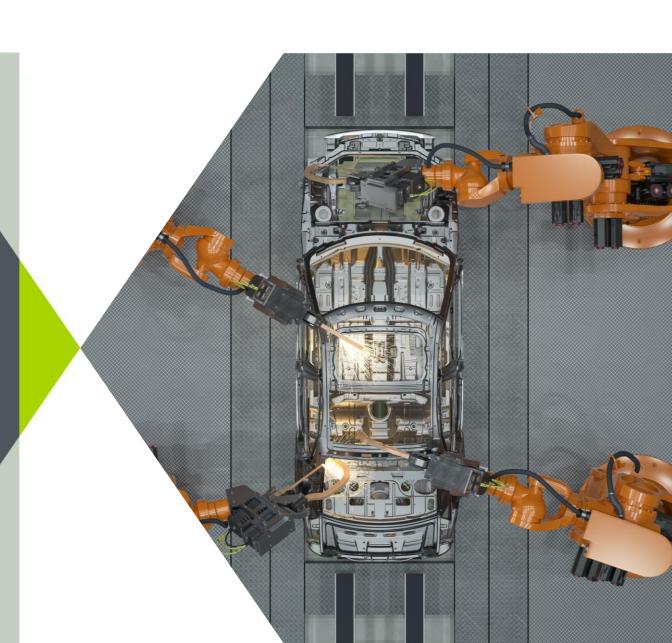


2022 Manufacturing Survey Executive Summary

December 2022

These materials are intended to supplement a discussion with L.E.K. Consulting. These perspectives will, therefore, only be meaningful to those in attendance. The contents of the materials are confidential and subject to obligations of non-disclosure. Your attention is drawn to the full disclaimer contained in this document.





Inflation



Inflation at highest rate in 40+ years



Supply chain disruptions



Upheaval from COVID-19 pandemic demand/supply shocks and war in Ukraine



Geopolitical instability



Growing risk environment, with major recent disasters such as Russo-Ukrainian War



Labor shortages



Tumultuous labor market with record high turnover and job openings

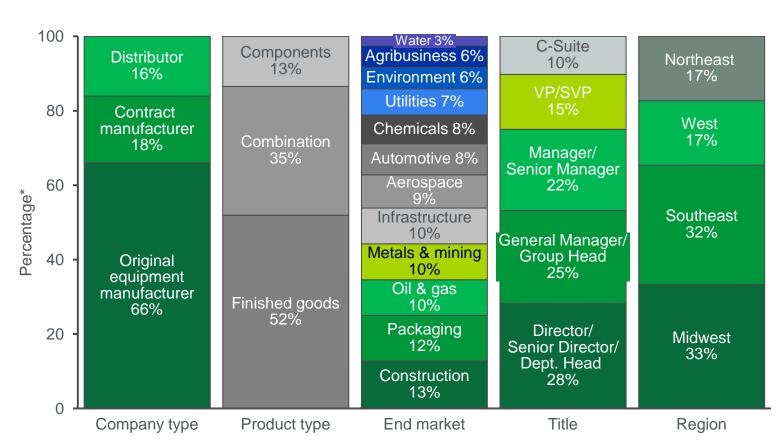
Given the current environment and impacts on U.S. manufacturing businesses, L.E.K. surveyed executives to understand the impact on their near- and long-term strategic priorities



Figure 2

How industrial companies are addressing key challenges and planning for the future

Survey of ~160 U.S. industrial executives in June 2022 ...



... accompanied by in-depth interviews with senior executives

SVP, Global Sales
President

Board Director

Representative titles

General Manager

President

EVP

VP, Product & Aftermarket



Source: L.E.K. survey and analysis



^{*}Percentages may not add up to 100 due to rounding

^{**}Not exhaustive; excludes midsized companies

Figure 3

Industrial executives are navigating a trying business landscape while eyeing several long-term challenges that still must be addressed

Business challenges likely to persist

Two years of disruption and turbulence | Manufacturers experienced profound operational, supply chain and talent disruptions during the pandemic, and brushfires from supply chain disruptions, rising input costs and labor shortages continue to take oxygen from the executive board room

High degree of challenge, despite focus and efforts | Despite their best efforts to address these issues, a large portion of manufacturing executives still see these operational and cost issues as highly challenging to address, both today and tomorrow

No end in sight | The majority of executives expect to be working on these same issues for several more years, especially labor shortages and supply chain disruptions, suggesting they will continue to sap management's attention and resources away from long-term goals

Difficult balancing act with long-term goals

Immediate threats crowding out other priorities | Companies are prioritizing immediate business risks that demand their full attention – hence less than 33% are actively addressing longer-term strategic goals today, notably digital transformation, electrification, automation and sustainability

'Kicking the can' on long-term goals | Manufacturing executives are generally minimizing activity on long-term goals such as ESG, electrification, automation and digital, hoping that business conditions will allow them to more fully address these goals by 2025

We believe industrial companies that aggressively invest <u>today</u> in long term-strategic goals (ESG, electrification, automation and digital) can enable significant competitive advantages



Figure 4 What managers are most worried about today and tomorrow

Source: L.E.K. survey and analysis

Percentage of responses rated 6 or 7, with 7="extremely challenging" to address

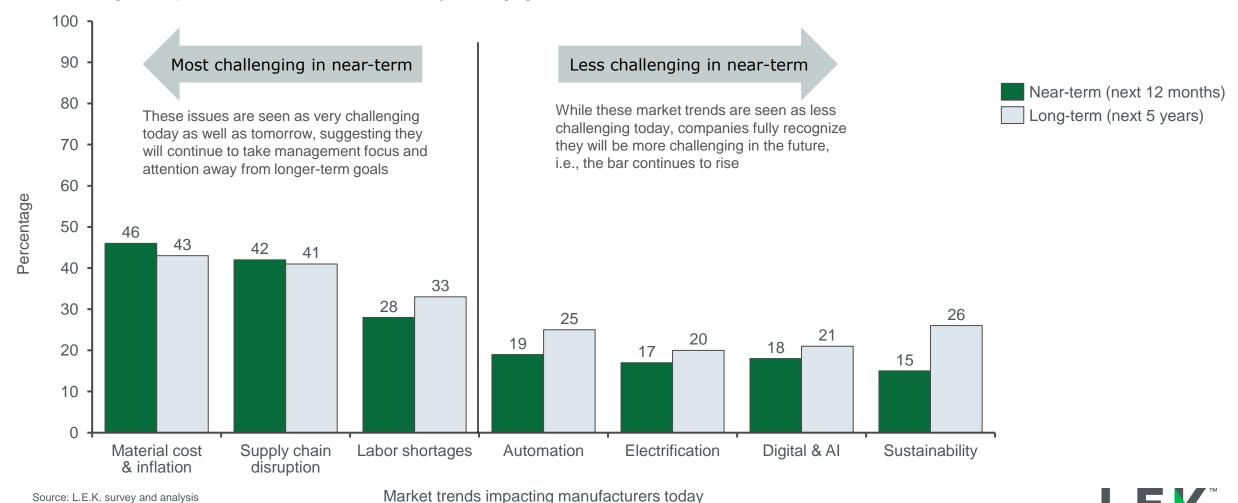


Figure 5Where managers are focusing their attention

Percentage of companies that have plans/initiatives to address trends 100 90 More focus in near-term Less focus in near-term Near-term (next 12 months) 80 Efforts to address these issues are expected to Long-term (next 5 years) Efforts to address these longer-term market increase, suggesting companies see themselves trends have been de-prioritized for now, but more 70 working on these issues for several years companies expect to address them within the 64 next several years 59 60 Percentage 51 50 50 50 43 41 39 40 37 32 31 30 27 27 20 10 Material cost Supply chain Labor shortages Electrification Automation Sustainability/ESG Digital & Al

LEK

& inflation

disruption

Figure 6

Depending on the specific end markets they serve, industrial executives are dealing with slightly different priorities and challenges*

Percentage of respondents rated 5, 6 or 7, with 7 meaning "very impactful" (N=111)**							
Overall (most to least)	Aerospace	Automotive	Building & construction	Infrastructure	Metals & mining	Oil & gas	Packaging
Supply chain disruption	5						
Material cost & inflation		\$	↑				\$
Automation							♠
Labor shortages				\$			I
Electrification			\$ \$				
Sustainability /ESG		♣			\$	\$	
Digital & Al			•				•
Geopolitical risk	I	•					

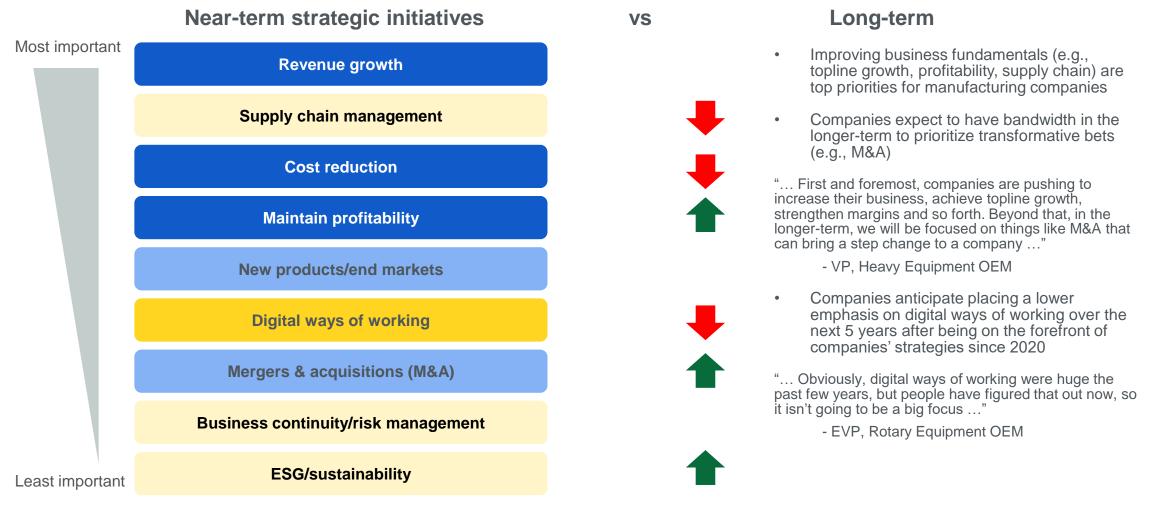
^{*}Survey question: To what degree do the following trends have an impact on your strategic priorities for the next 12 months?

^{**}Percent of respondents rated a 5 used to break any ties within trends; only includes end markets that over 12 respondents selected as their primary end market Source: L.E.K. survey analysis



Figure 7

How IE&T companies are balancing near-term vs long-term strategic initiatives*



Key

*Survey question: Which of the following best fit the strategic priorities of your company for the next 12 months and the next 5 years? (Please select up to five choices in order of importance) Source: L.E.K. survey and analysis



Operational Digital



Figure 8

Current efforts and investment areas to address key goals (1 of 2)



Material cost & inflation: Companies continue to battle cost inflation. About 75% of companies have already added suppliers, implemented new pricing structures and improved costing fidelity, resulting in ~78% having passed on most or all cost increases to customers. Executives expect to accelerate investments in inventory management to dampen price increases and improve their price forecasting abilities, as >50% of respondents expect prices to continue an elevated trajectory through 2025



• Supply chain disruption: Companies report no cure-all measures. Companies are accelerating investments across a range of activities such as inventory buffers, monitoring systems, parts commonality and supplier diversification, but are encountering a range of economic and time constraints and partnership challenges as they do so



• Labor shortages: Almost 50% of manufacturers are experiencing labor shortages that they expect to continue for the remainder of 2022, and over 80% of companies expect compensation increases, retention incentives and location openings will be needed in coming years to attract labor, as well as training and upskilling programs to create the talent they need



• **Automation:** Relatedly, companies expect to use automation to supplant their workforce. Over two-thirds of companies have made investments in **facility automation**, **robotics** and **manual process replacement** over the past 3 years; over 85% expect to do so in the next 3 years — with 96% anticipating increased investment in robotics





• **ESG:** While not a top current priority, over half of companies report investing more in ESG over the past 3 years — but over **80% expect significant accelerations in investment** on sustainable products and operations, workplace safety, and ED&I through 2025



• Electrification: Relatedly, manufacturing companies report continued investment in electrification, with two-thirds of companies investing in electrified new and existing products over the past 3 years, accelerating to ~90% investing in these technologies over the next 3 years



• **Digital:** A decade into the digitalization trend, ~90% of manufacturing companies expect to accelerate their investments to improve the products, services and experiences they offer to customers, as well as their to own operations, while the high investment in digital ways of working is expected to see stable increases

