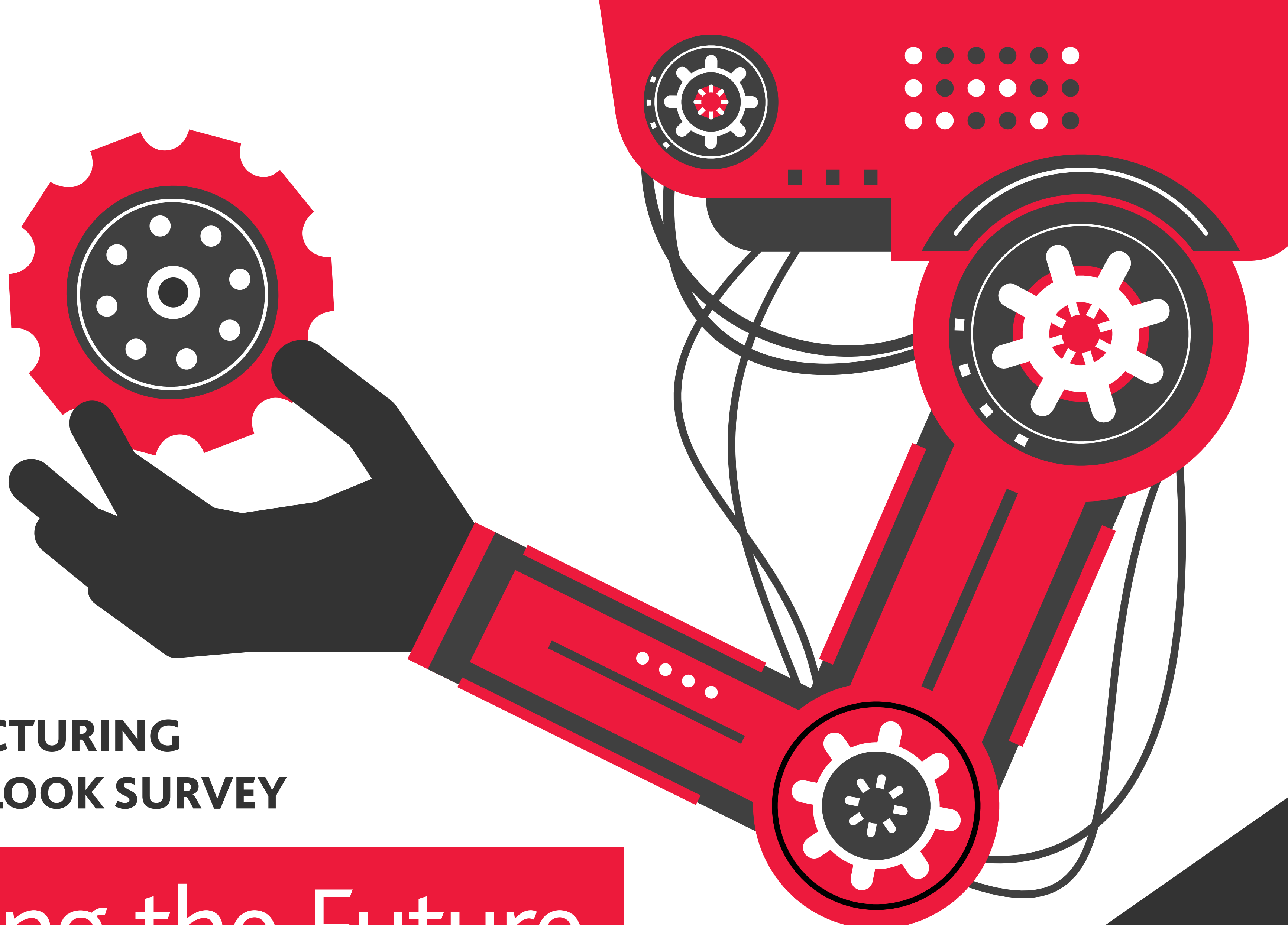


2023 BDO MANUFACTURING CFO OUTLOOK SURVEY

Forging the Future

BDO

Manufacturing at a glance

Despite disruption, manufacturers are forging ahead. Although the economic outlook is uncertain, supply chains are in disarray and the chip shortage continues to disrupt expansion, manufacturers are planning investments that will help improve resilience and accelerate growth. They'll reimagine their business models, improve decision making with Industry 4.0 and align their tax and supply chain strategies to mitigate risk and uncover new value.

Here's a preview of what you'll read in the ***2023 BDO Manufacturing CFO Outlook Survey***:

69% of manufacturers are **thriving**: they saw revenue and profitability increases in 2022.

70% say supply chain disruption will pose some **risk or a significant risk** to their business in 2023.

36% will pursue **Industry 4.0** investments.

68% will **expand** U.S. operations.

38% will pursue **M&A** in response to **higher cost of goods sold (COGS)**.

Read on to learn more about manufacturers' top **challenges, priorities and strategies for 2023.**

The ***2023 BDO Manufacturing CFO Outlook Survey*** polled 125 manufacturing CFOs with revenues ranging from $250 million to over $3 billion in October 2022. The survey was conducted by Rabin Research Company, an independent marketing research firm, using Op4G's panel of executives.

The new manufacturing resilience agenda

While manufacturers are growing, they are cautious of headwinds, including rising interest rates, higher costs and economic volatility. Despite above-average performance — 69% of manufacturers reported profitability and revenue increases last year — their future financial position is not certain. Manufacturing CFOs project that a downturn would lead to significant financial issues.

Fortunately, manufacturers have learned from previous downturns and are taking proactive measures to increase resilience.

Top Profitability/Liquidity Issues

Manufacturers are anticipating the following profitability and liquidity issues in the next 12 months:

49% - Increasing payables beyond historic terms in total amount and/or aging in days.

42% - Significant decreases in revenue or deteriorating profit margins.

39% - Insufficient cash on hand or the need to delay expenditures.

2023 Resilience Strategies

48% - Taking advantage of clean energy incentives in the Inflation Reduction Act.

39% - Cost optimization/reduction.

36% - Digital transformation.

25% - Restructuring or reorganizing.

21% - Understanding tax implications of strategic business decisions.

Outcomes drive our strategy. We start planning by asking questions: What are our goals? Do we want to increase sales, innovate everywhere, or make better use of our data? Once we agree on the desired priorities, we ask our teams around the world to build plans to achieve those objectives.

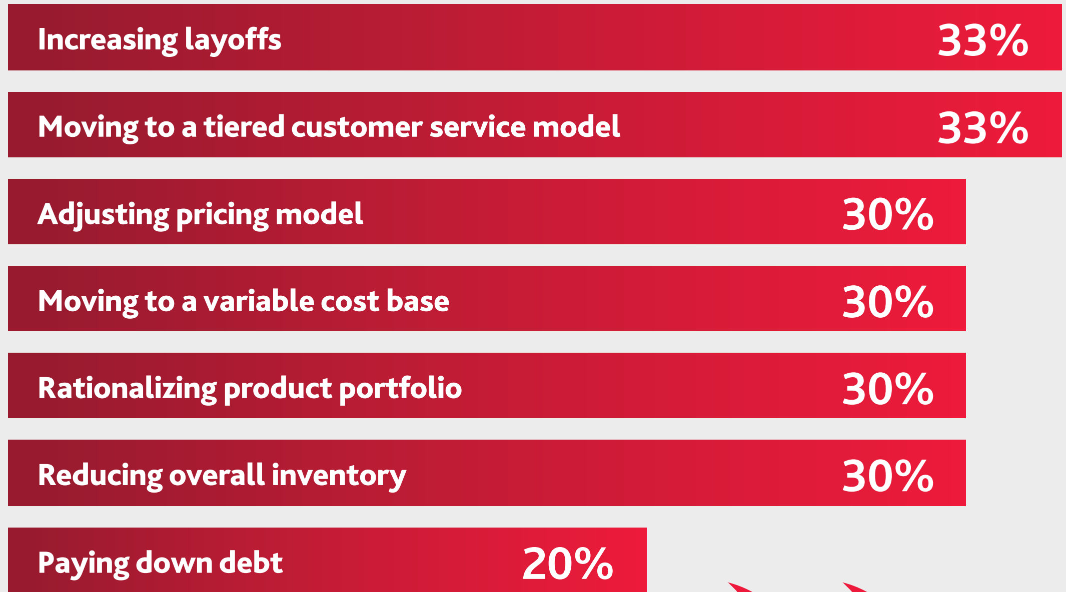
Jacco Kuipers
Chief Financial Officer at Ball Horticultural Company

It's been proven that more digitally mature companies have an edge during a downturn. Manufacturers who maintain or increase Industry 4.0 investment will be better positioned to adapt to disruption and capture new opportunities than the competition. For example, implementing automation technology can improve efficiency in operations and increase profitability. Additionally, CFOs should not only look to improve data visibility throughout their own supply chain, but also share data with customers and vendors. The goal is to build a digital thread, which creates end-to-end supply chain visibility and enables closer collaboration across the supply chain.

Tax planning will be another key component of manufacturers' resilience strategies for 2023. The Inflation Reduction Act (IRA) created and expanded tax incentives that manufacturers are pursuing to reduce their total tax liability. Claiming tax credits will allow companies to free up cash without relying solely on approaches that may limit future growth potential, such as layoffs or reductions in service. Understanding the tax implications of business decisions can help manufacturers mitigate the impact of those strategies on total tax liability, which is another way to optimize costs.

Manufacturers have also learned that a crisis is a smart time to pivot, and a quarter of CFOs plan to restructure or reorganize their businesses. Restructuring or reorganization could include changing their business model from B2B to B2C, enhancing e-commerce capabilities or overhauling their product portfolio. Manufacturers who take the opportunity to revisit their business models amid a downturn and adapt to changing customer expectations may experience faster growth than the competition.

Pivot Plans in a Downturn



Amid a downturn and supply chain challenges, preserving high-quality customer service for all customers can be costly. Moving to a tiered model will help maintain service levels. Manufacturers should prioritize their highest-value customers — those that are the most profitable and/or drive the most revenue. A tiered customer service model could involve having dedicated service or sales representatives, preferential pricing structures and priority delivery for the highest-value customers. These strategies can help deepen relationships and increase customer retention, which will be key to protecting revenue in a market downturn.

> *Commitment to resilience will determine who wins the future. Competition will be fierce in the next year, and the window to gain a competitive advantage will be short. Manufacturing CFOs who can balance financial discipline and quality customer service while continuing to innovate will see the most success.*
>
> **Bill Pellino**
> Partner and National Leader, Manufacturing

Recommendations

Manufacturers should pursue a combination of operational and financial strategies to bolster resilience, mitigate risk, optimize costs and increase top-line growth. Consider the following approaches for success in 2023:

Automate & improve decision making with Industry 4.0.
Manufacturers should invest in advanced analytics tools to improve decision making, which will help them make better decisions faster than the competition. By investing in automation, manufacturers can mitigate the impact of the labor shortage and more easily scale up or down operations depending on market conditions.

Determine price elasticity & revisit product portfolio.
Based on demand changes in previous downturns, explore how you can adjust pricing models while mitigating declines in sales. Also consider deprioritizing SKUs that you expect to underperform in a downturn or have lower margins than other products.

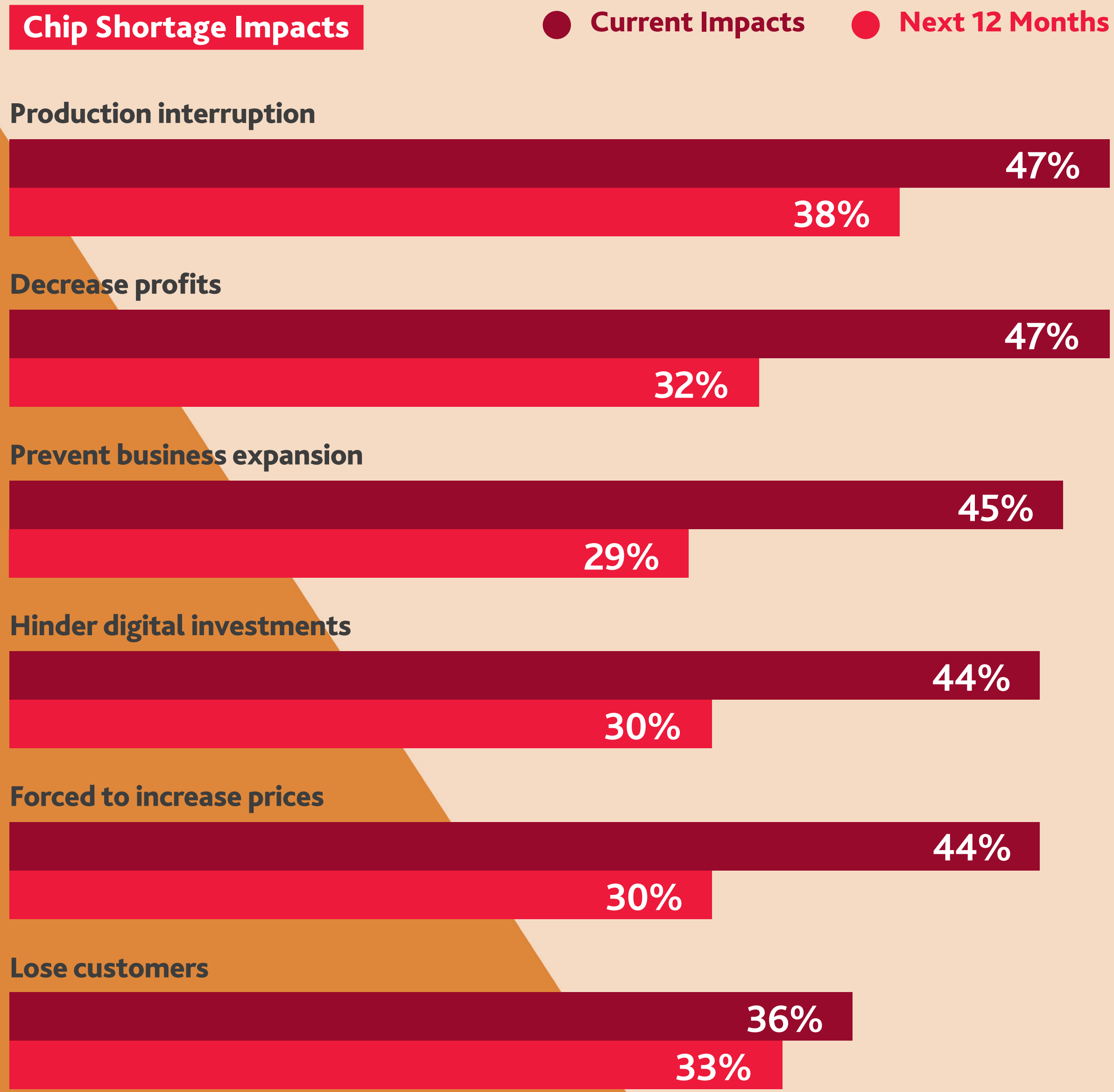
Evaluate all business activities to determine opportunities to claim tax credits.
Manufacturers who pursue Industry 4.0 initiatives may be missing opportunities to claim R&D credits and/or **new and expanded tax credits via the IRA** that help offset investment costs.

Accelerate the speed of modeling the tax implications of business decisions.
Tax planning usually lags behind operations, and the ability to make informed decisions quickly in a volatile market is critical to success. **Read more about how to transform your tax department with technology.**

READY TO BUILD YOUR RESILIENCE STRATEGY?

Start planning with our framework ▶

Spotlight: chip shortage outlook



The chip shortage continues to impact all sectors of manufacturing, although CFOs anticipate some of the effects will ease over the next 12 months. It will take years, however, to build enough manufacturing capacity to fully alleviate the shortage and meet long-term demand for chips.

Chips are critical to all manufacturers regardless of whether they produce chip-related products. For example, the shortage has forced some companies to delay Industry 4.0 investments. They've had to hold onto outdated models of computers, robots and other Internet of Things devices that may have been in short supply or too costly. Until additional capacity is built, manufacturers will need to watch out for fraudulent chips or ones made with inferior parts, as bad actors could look to capitalize on the shortage.

The future is bright for semiconductor manufacturing. The CHIPS for America Act provides significant incentives to onshore production, but the application process will be competitive. Semiconductor CFOs should prioritize securing private capital, negotiating state and local incentives and drafting a detailed investment plan to improve their chances of obtaining funding.

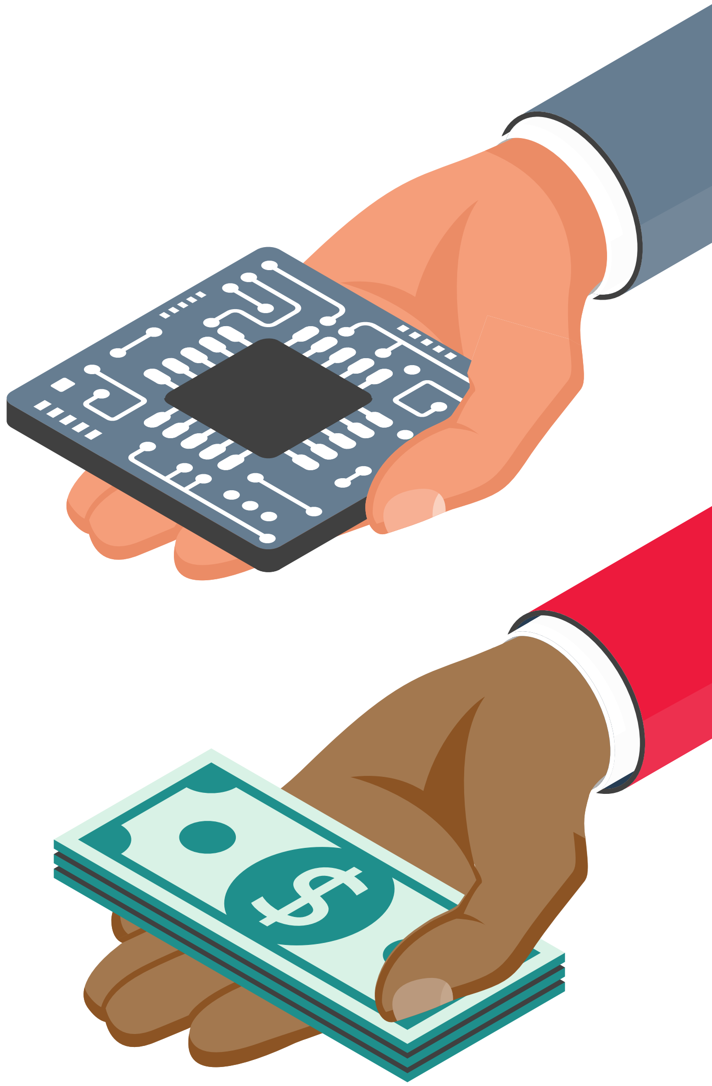
Tom Stringer
Partner, National Leader of Site Selection & Business Incentives

BDO's Take

Solving the chip shortage is critical to the success of the U.S. economy. Semiconductor manufacturers should consider funding opportunities for expansion made available via the CHIPS for America Act. If the CHIPS Act is successful, the federal government will likely pass additional funding initiatives to support domestic chipmaking. The CHIPS Act could also pave the way for government involvement in the onshoring of other critical sectors of manufacturing — such as medical devices or pharmaceuticals — which the Biden administration has previously deemed critical to U.S. national security.

Need help confirming your Statement of Interest, gathering information for your CHIPS Act application or securing incentives?

CONTACT US. ▸



Building a future-focused supply chain

Over the last few years, manufacturers have considered making significant changes to their network footprints in response to global disruption.
Now, they are prepared to put those plans into action and alter the shape of global supply chains.

Even an economic downturn will not stop them:

75% of CFOs say their plans for supply chain will increase or not change if economic conditions worsen.

Expected Inventory Issues for 2023

Rising raw material and supply costs	46%
Extensive excess inventory	36%
Unreliable supplier performance	34%
Continued supply shortages	33%
Inaccurate supply and demand forecasting	32%
Demand volatility	18%

Planned Responses to Higher COGS

Here are the actions manufacturers plan to take in the next 12 months in response to higher cost of goods sold (COGS):

Improve supply chain systems & visibility	42%
Raise prices for customers	31%
Move production to a geopolitically close U.S. ally	30%
Find alternative suppliers	28%
Onshore production to the U.S.	23%
Absorb the increase	22%
SKU rationalization	21%

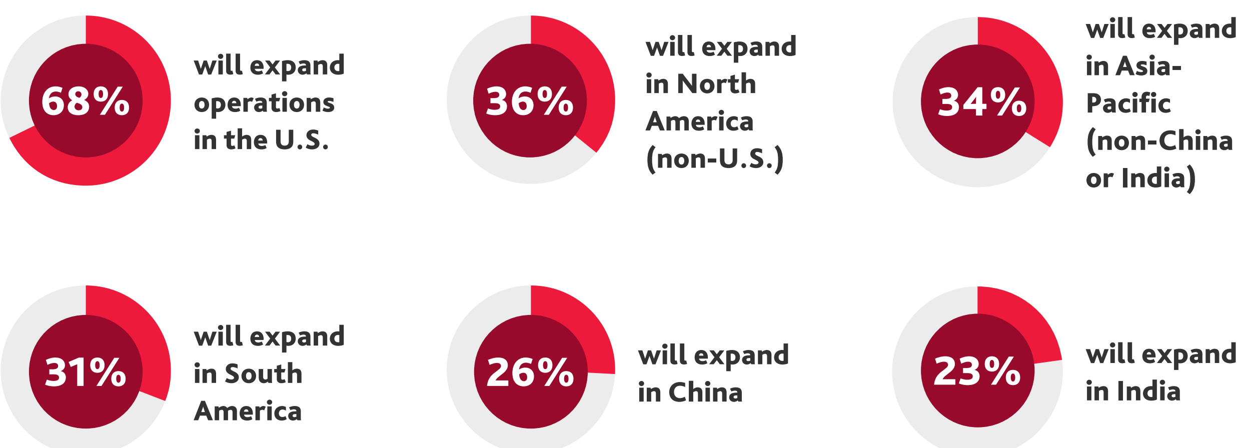
Manufacturers' issues with excess inventory could lead to a shift back toward just-in-time (JIT) inventory strategies. There may never be a complete return to JIT, but there will likely be a rebalancing where manufacturers hold less inventory as shortages ease and demand decreases. Manufacturers' plans to improve supply chain visibility will help alleviate inventory planning issues, as greater visibility can provide data that improves demand forecasting capabilities. Investments in technologies like material requirements planning, warehouse management systems, transportation management systems and forecasting tools can provide the ability to track products, demand signals and sources of disruption across the entire supply chain.

Increasing supply chain visibility will also help manufacturers meet environmental, social and governance (ESG) goals, which will continue to increase in importance due to evolving expectations from customers, investors and governments. Access to deeper insights about plant and supplier operations will help in particularly with supporting reporting for manufacturers' sustainability strategies. For example, the Uyghur Forced Labor Prevention Act (UFLPA), which went into effect in June 2022, bans imports of products into the U.S. produced with forced labor from the Xinjiang region of China. Companies **must meet a burden of proof** that their products were sourced with ethical labor, which requires data from their suppliers. Looking ahead, there will be additional legislation with requirements around ethical labor and sustainability, which will require collaboration across the supply chain to provide data on production and labor practices.

Collaboration will be key to success in the next era of supply chain management. CFOs must work closely with internal and external stakeholders to share information that informs decisions. Manufacturers who can collaborate successfully will have an edge in turning their supply chains into value drivers.

R.J. Romano
Managing Director, Operational Value Chain Practice

Where Manufacturers are Moving



Reasons for Reshoring

Here are the top reasons manufacturers are considering reshoring in the next 12-18 months:

Rising transportation costs and declining on-time service	46%
Inability to fully meet customer demand	41%
Rising total tax liability	37%
Increasing frequency and severity of natural disasters	34%
Falling profitability	28%
Rising labor prices	27%
No plans to shift operations to a different country	2%

The incentive for offshoring used to be lower costs, but rising labor, transportation and other input costs have eroded that advantage. It has also become clear that complex global supply chains are vulnerable to financial and operational disruption. Additionally, onshoring can reduce transportation distances and lower an organization's carbon footprint, which helps achieve ESG goals. To maintain service levels, companies are planning to add regional support in the U.S. and neighboring countries to their global supply chain. There likely will not be a mass exodus of production from China or any other single location — manufacturers will take a hybrid approach where they shift some operations for specific products lines to different locations. Companies with more regional supply chains can have less overall exposure to natural disasters, less complex tax obligations and more insulation from transportation bottlenecks and cost fluctuations.

Every manufacturer's hybrid model will look different depending on their product portfolio and goals. Some manufacturers will prioritize moving operations closer to key customers and markets, while others may want to keep a global network for cost, labor and material availability reasons.

Recommendations

Reimagining network strategy requires extensive analysis, planning and collaboration with internal and external stakeholders. Consider these steps to optimize planning and execution:

Break down silos and improve visibility.
Improve the ability to access and analyze information from across the business — from warehousing to manufacturing to financial and customer data. Use this data to inform decision making, including inventory strategy, production schedules and network shifts. Data sharing between customers and vendors can also help strengthen relationships and create opportunities for collaboration.

Develop rapid scenario-planning capabilities.
By building a digital twin (digital replica) of their supply chain, manufacturers can model the operational and financial implications of proposed network shifts. The more data a manufacturer has access to, the more detail the model can give about the implications of decisions for service and risk levels, costs and more.

Capture local incentives.
Companies considering onshoring to the U.S. should negotiate incentives packages with state and local authorities. They also will need to follow up with these authorities as the move takes place to ensure all promised incentives are captured.

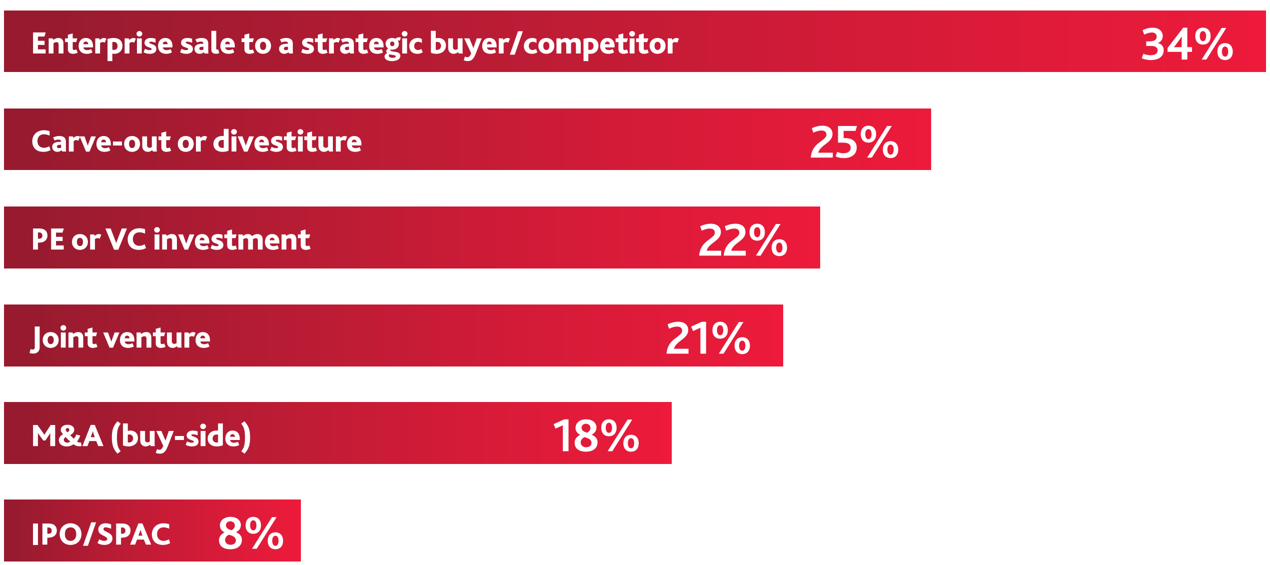
IS YOUR SUPPLY CHAIN PREPARED FOR WHAT'S AHEAD?

Learn how to optimize your supply chain management strategy ▶

Prioritize integration for success

Manufacturers historically have not paid sufficient attention to post-merger integration. According to the 2022 Manufacturing CFO Outlook Survey, 31% of manufacturers said recent deals have failed to achieve expected synergies. This year, only 15% of manufacturing CFOs say post-merger integration is their top area for improvement in dealmaking, which could be an oversight. Integration is critical to realizing full deal value, and the degree to which a manufacturer can capture value from their deals will determine who gets ahead in the coming months. M&A will be a key component of manufacturers' strategies for 2023, and they will need to prioritize integration to succeed — especially if economic conditions worsen.

2023 M&A Plans



Amid economic uncertainty, prioritizing post-merger integration will be paramount to success. Looking ahead, manufacturers that can unlock the most value from deals will have an edge over their peers in speed, cost and resilience. Their organizations will be more efficient, ready to adapt to changing conditions and capture new opportunities.

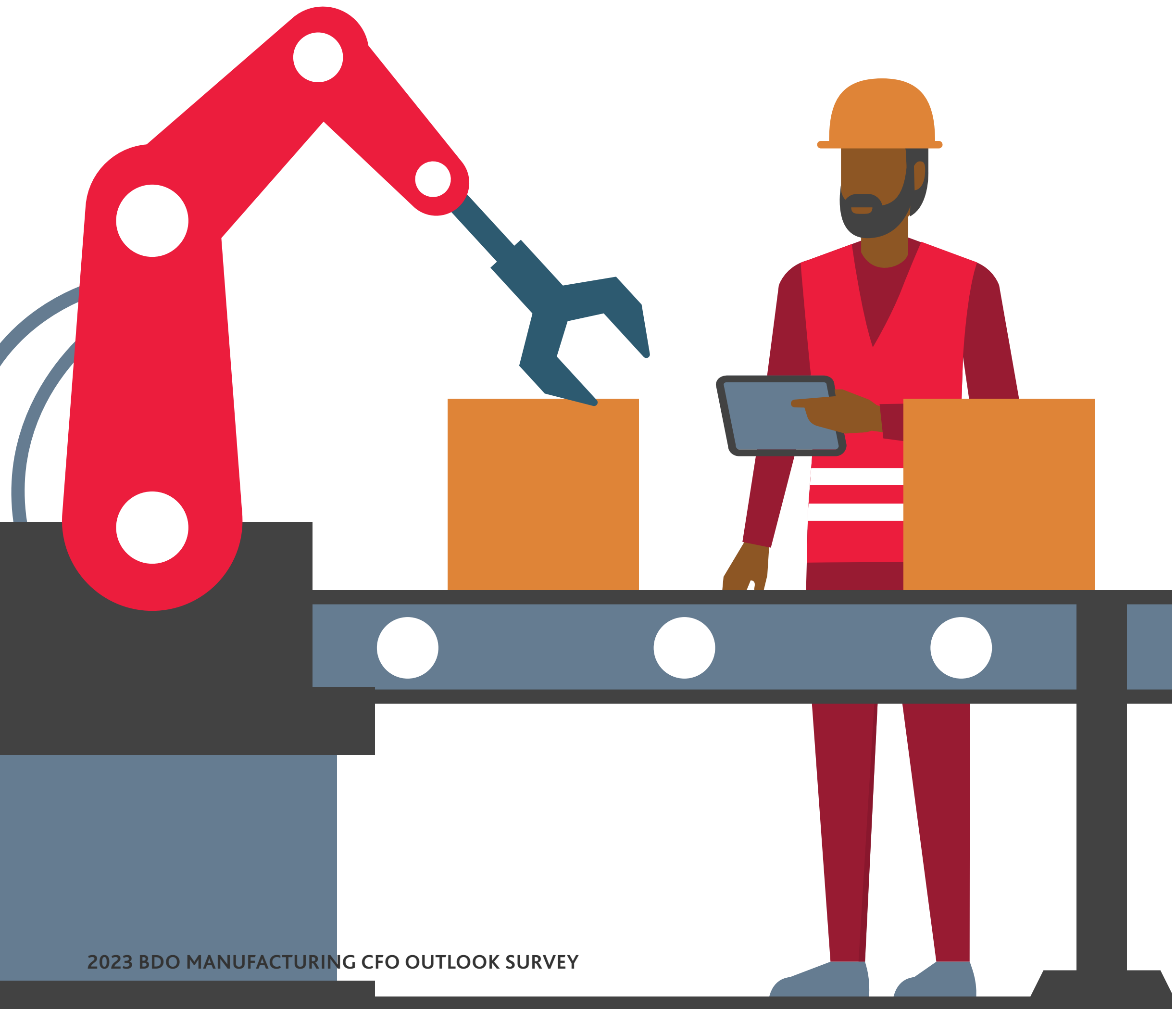
Russell Clarkson
Managing Director, Management Advisory Services

Why M&A?

38% of organizations will pursue M&A in response to higher COGS.

31% say their top strategic goals are enhancing product or service offerings.

30% want to grow their market share.

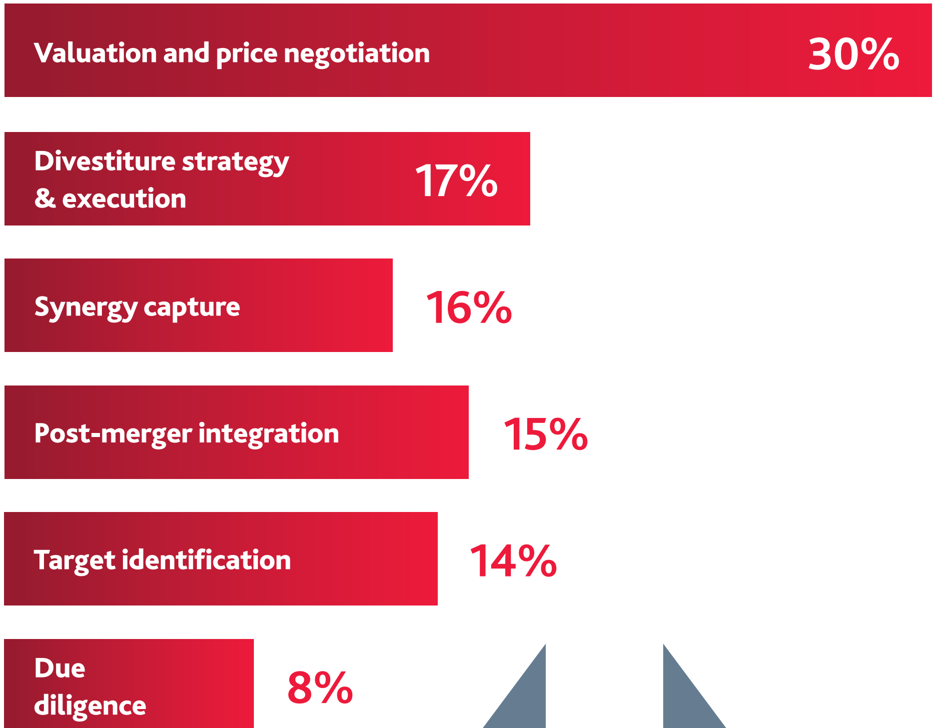


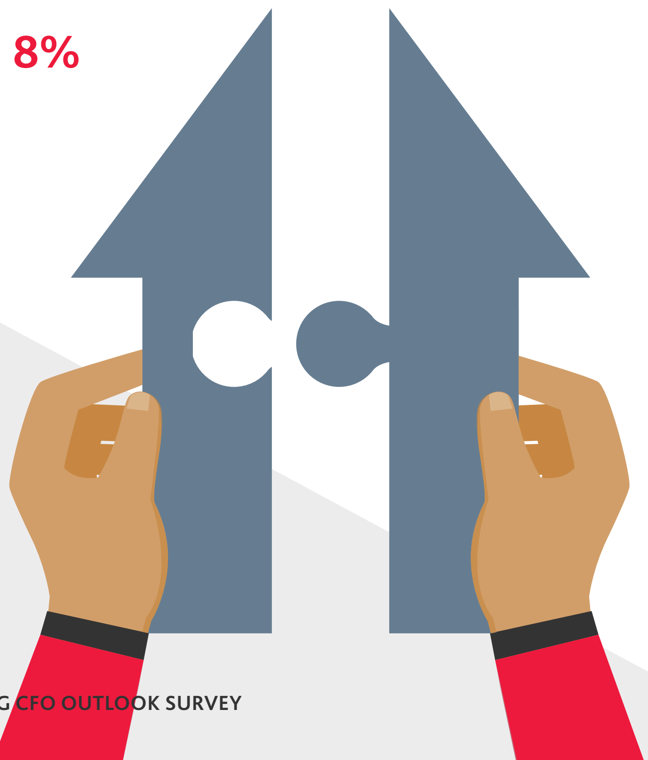
Rising costs will be a major motivator for M&A in 2023. Older owners, particularly of family-owned manufacturing businesses, could look to sell before the economy worsens and their profits erode. There could be an opportunity for manufacturers to buy these businesses at relatively bargain valuations to expand scale, acquire new customers or enter a new market. Some manufacturers may buy key suppliers to reduce costs, ensure reliability of supply and potentially accelerate their onshoring strategy if those suppliers are U.S.-based.

The one quarter of manufacturers planning divestitures and carve-outs are likely spinning off non-core elements of the business to focus on the most profitable business lines. If economic conditions worsen, 30% of manufacturers say they would increase investment in M&A — which could mean there will be a higher number of sales than initially projected. Manufacturers who sell parts of their business should use the capital they receive to invest in the core business, such as in Industry 4.0, upskilling initiatives and customer service. Manufacturers who are on the buy side of these deals should prioritize cost optimization and improving efficiencies in their integration plans. Specific strategies could involve product portfolio rationalization and consolidation with existing production and distribution facilities.

Additionally, investment from private equity or venture capital could help fund digital initiatives or expansion into new products and markets. Joint ventures could be examples of peers or suppliers working together to combine capabilities and capture an opportunity they've spotted in the market.

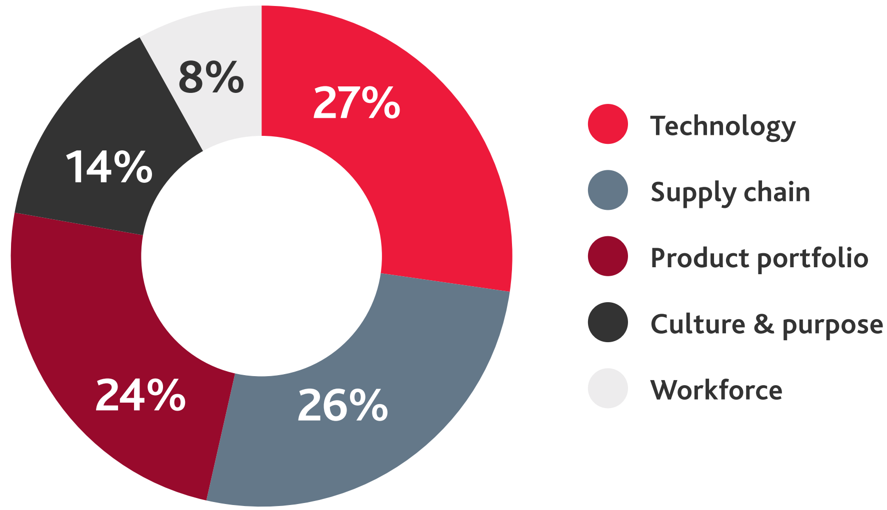
Top M&A Issues





Top PMI Priorities

Here are manufacturers' top post-merger integration priorities in the next 12 months:



When it comes to post-merger integration, technology and supply chain will be top of mind for manufacturers in 2023. Mistakes in either of these areas can disrupt customer service, which could be disastrous in a downturn, so be clear on the integration strategy for these areas and create a plan that maintains service levels. Manufacturers who do not pay enough attention to workforce could see issues with their integrations, regardless of the strength of their plans for technology and supply chain integration. For example, if a manufacturer lays off a significant portion of a newly acquired company's workforce, they could lose valuable institutional knowledge or individuals with key customer relationships. Additionally, neglecting to communicate the company's vision to workers, fill skills gaps and make other needed changes can be harmful for morale and retention.

Recommendations

To optimize post-merger integration planning, consider the following steps:

Revisit network strategy.
Examine your supply chain to determine which production and logistics facilities will remain open and which should close. In some cases, an acquisition requires companies to rethink their entire network strategy, including pre-acquisition facilities, to service the expanded customer base.

Prioritize technology integration.
For example, having two or more ERPs could prevent manufacturers from adapting quickly to evolving market conditions or capturing opportunities from new demand patterns. ERP integration enables greater supply chain visibility and operational speed and decision-making. Integrating data analytics and cybersecurity should also be top priorities, so that data is not being collected and processed in silos and to make sure there are no gaps in security that could threaten the business.

Preserve service quality.
Customers should see the same level of support during and after an acquisition. The changes in how they interact with a company should be minimal, or, if there are changes, they should be beneficial to the customer. Any planned adjustments should be communicated in advance so customers know what to expect, the benefits they will receive and the timeline for implementation.

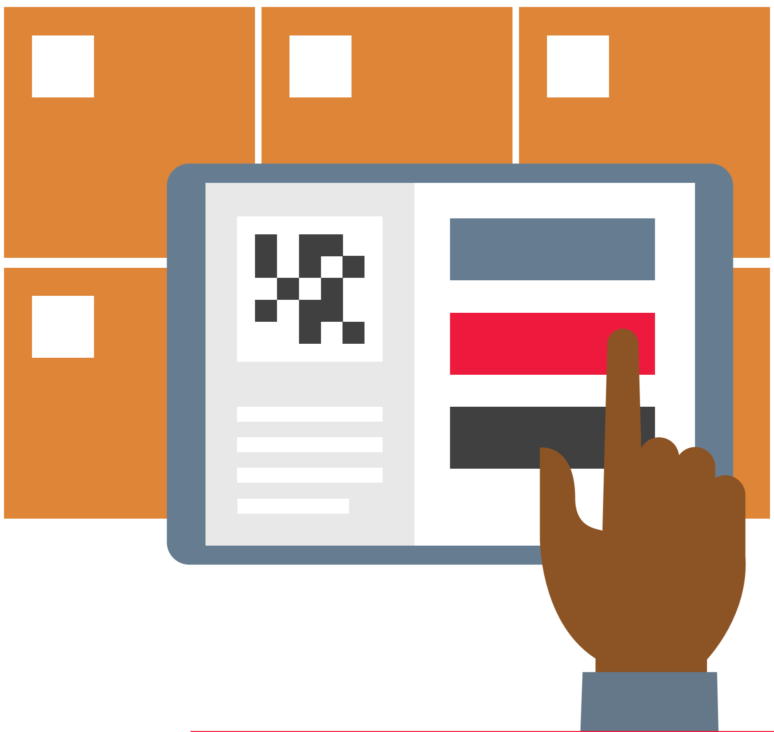
Be adaptable.
Companies should update integration plans as market conditions and business needs change. For example, if a manufacturer predicts demand for a product or service will fall during a downturn, it may not make sense to prioritize that area during integration.

RECENTLY COMPLETED OR PLANNING AN ACQUISITION THIS YEAR?

Avoid these common integration mistakes ▶

Looking ahead

To succeed in the future, manufacturers must rethink their businesses. Success means going beyond adapting to changing stakeholder expectations, and instead proactively creating products and services to fill their needs. Competition amongst the highest-growth manufacturers will be intense — and **organizations who can adapt and capture opportunities fastest will be the most successful.**



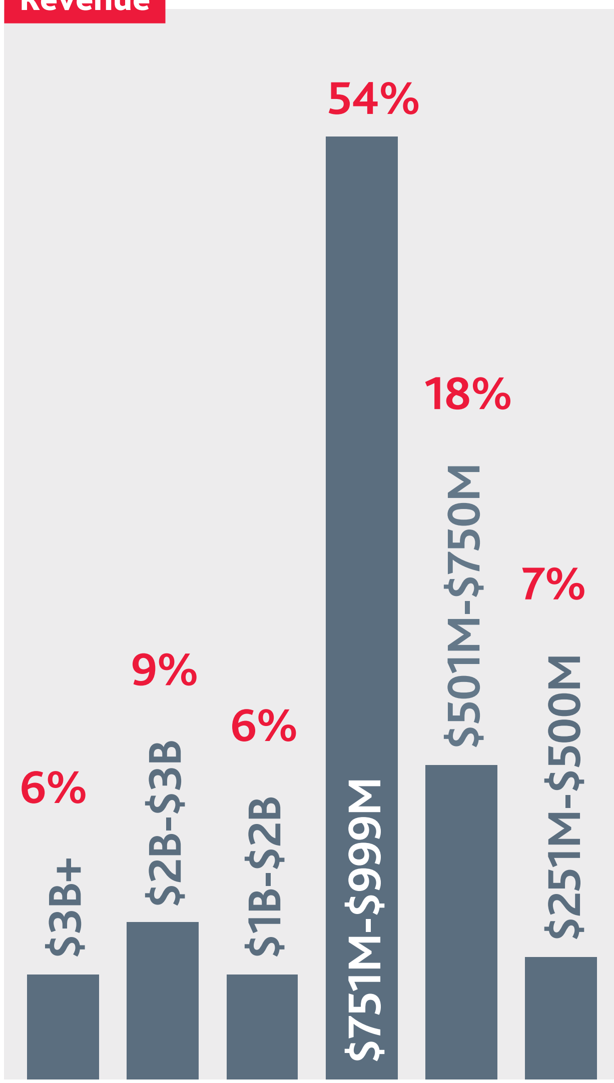
> *The role of the CFO is changing dramatically. My top priority is brainstorming solutions to customer needs and thinking through my company's vision. Manufacturing CFOs need more than financial acumen to succeed – they need a deep understanding of their entire business and must collaborate to innovate.*
>
> **Chuck Beto**
> Chief Financial Officer, KSR International Inc.

Ready to find your competitive advantage? Get in touch. ▶

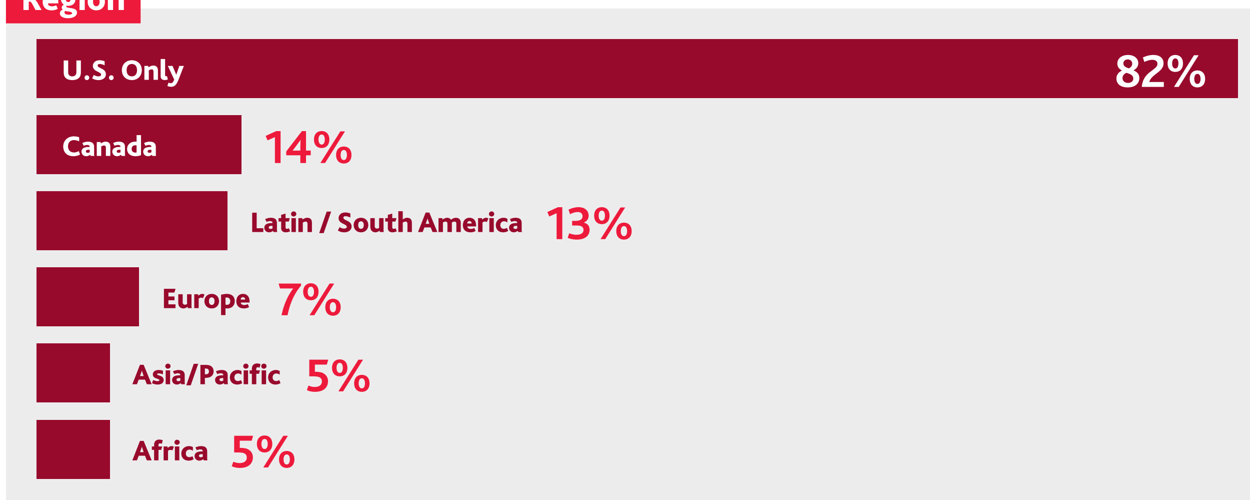
Methodology

The ***2023 BDO Manufacturing CFO Outlook Survey*** polled 125 manufacturing CFOs with revenues ranging from $250 million to over $3 billion in October 2022. The survey was conducted by Rabin Research Company, an independent marketing research firm, using Op4G's panel of executives.

Revenue

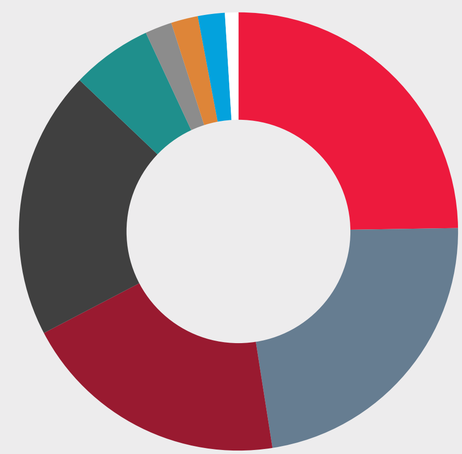


Region



Subsegments

Electronics and computers	25%
Apparel and textiles	23%
Automotive and transportation	20%
Semiconductors	20%
Materials (metals, wood, paper, plastic, rubber)	6%
Machinery	2%
Food and beverage	2%
Chemicals	2%
Aerospace and defense	1%



Contacts

Bill Pellino
Partner,
Manufacturing Practice Leader
bpellino@bdo.com

Russell Clarkson
Managing Director,
Management Advisory
rclarkson@bdo.com

Val Laufenburg
Partner,
Management Advisory
vlaufenburg@bdo.com

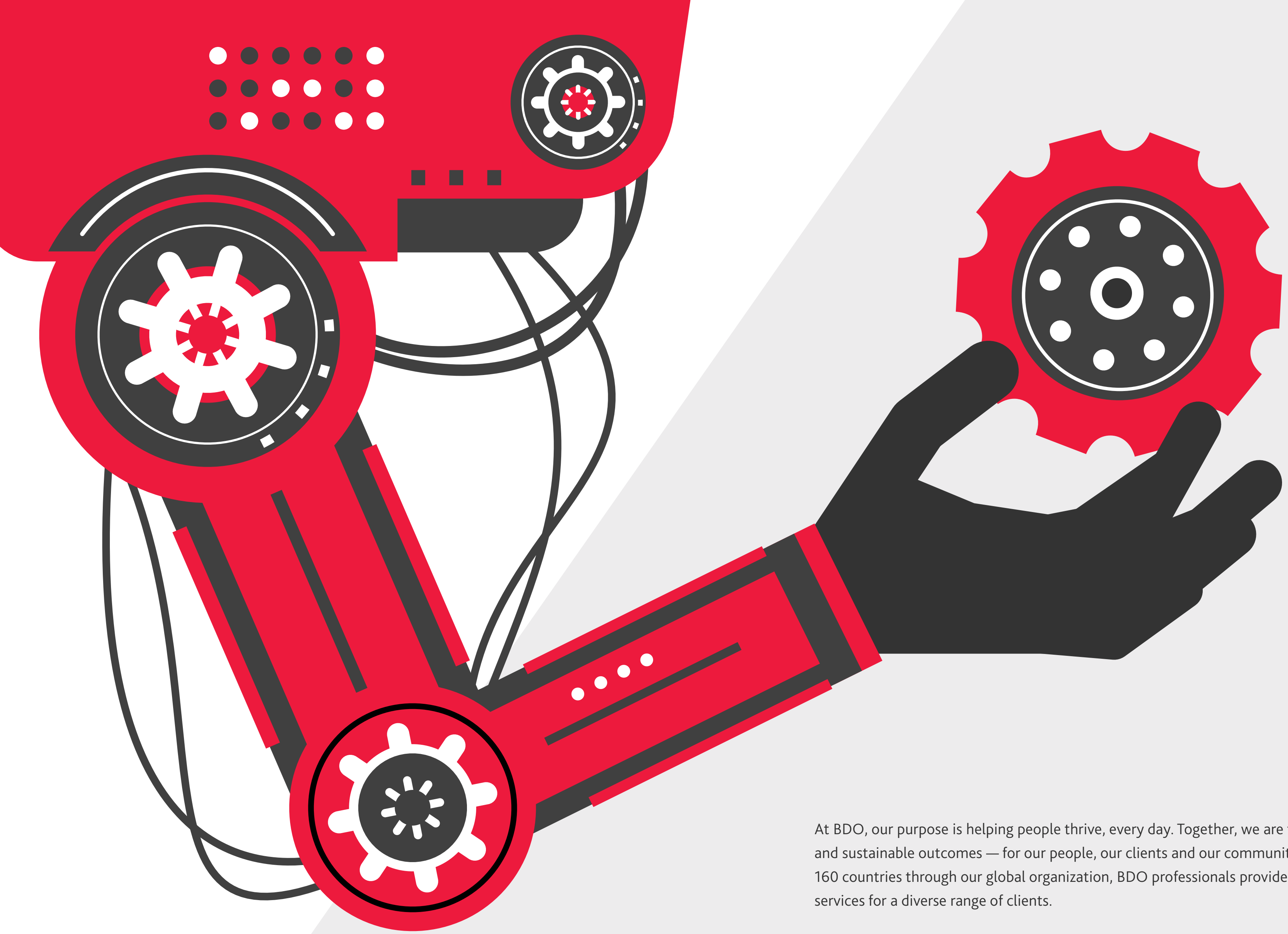
Maurice Liddell
Principal,
BDO Digital Manufacturing Leader
mliddell@bdo.com

R.J. Romano
Managing Director,
Operational Value Chain Practice
rromano@bdo-ba.com

Tom Stringer
Principal,
Site Selection & Incentives
Practice Leader
tstringer@bdo.com

Eskander Yavar
National Managing Partner,
Advisory
eyavar@bdo.com

bdo.com/manufacturing



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