



The Fifth Annual
Change in the (Supply) Chain Survey

Optimized for Growth:

*High-Tech Executives Adapt
to Meet Global Demands*





INTRODUCTION

Optimized for Growth: High-Tech Executives Adapt to Meet Global Demands

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The high-tech industry is poised for global growth. The middle class is expanding, bringing with it an increasing appetite for high-tech products. Demands are coming from new markets across the globe. Product lifecycles are shorter than ever before. There are new pressures and challenges – and new opportunities.

There is growing recognition that “business-as-usual” supply chain strategies no longer deliver optimal business results. Companies must adapt their supply chains to capitalize on new opportunities in current and new markets. Some changes will be large and some will be small, but they all will make an impact.

The fifth annual Change in the (Supply) Chain survey, fielded by IDC Manufacturing Insights, reveals how high-tech executives are adapting their supply chains to set themselves up for business growth. From evolving shoring strategies to entering new markets to prioritizing risk management to exploring new areas like 3D printing, supply chain executives are doing things differently.

The only thing that will remain constant is change. There’s one question that high-tech executives should be asking themselves: Is my supply chain optimized for growth?

EXPORTS: UP OR DOWN?

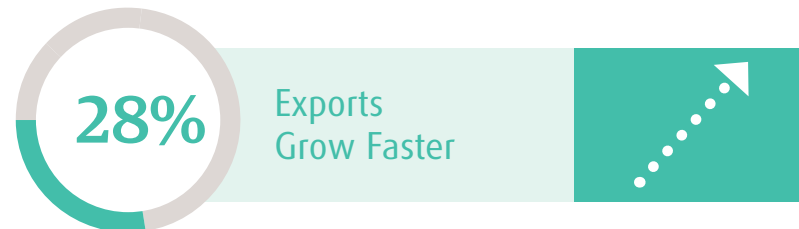
Continued growth expected for high-tech exports

The outlook for high-tech export growth remains very positive with 74% of survey respondents reporting that they believe exports will either grow faster or at the same rate over the next two years.

Globally, 28% of high-tech executives expect exports to grow faster. The most optimistic regions on future high-tech exports growing faster are Latin America (46%) and North America (36%).

Communications equipment manufacturers are the most optimistic about exports with nearly half believing exports will grow faster over the next two years. Manufacturers of computers and office equipment are the least optimistic about export growth.

High-Tech Export Expectations



SHORING STRATEGIES: THE RIGHT MIX?

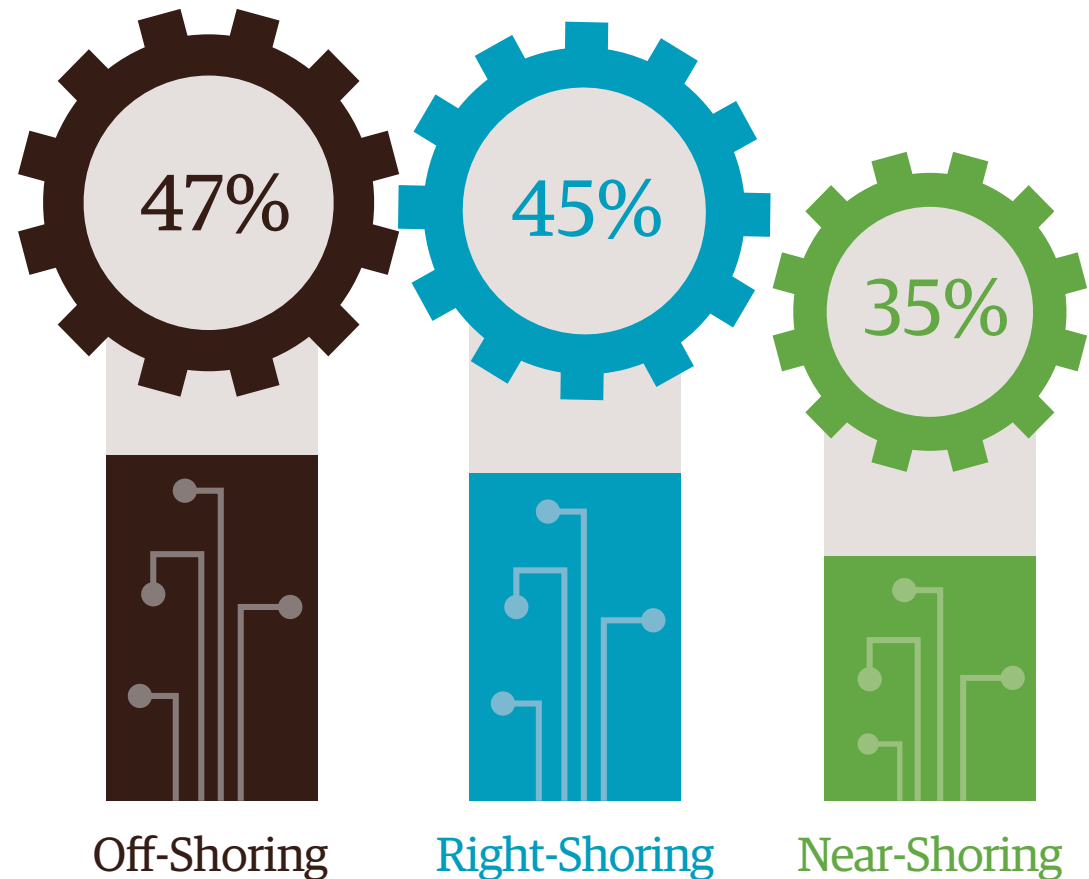
Flexibility is key in shoring decisions

As high-tech companies seek to capitalize on global growth opportunities while optimizing their supply chains, the sourcing debate continues: off-shoring, near-shoring or right-shoring?*

Our survey shows that companies are leveraging all of these strategies, indicating that the most important strategy is flexibility. These findings illustrate the importance of making sourcing decisions based on a variety of factors such as company size, customer demands and individual product specifications, among others, rather than taking a one-size-fits-all approach.

- * **Off-shoring:** moving manufacturing and/or assembling products to traditional low-cost countries based on historical labor rate differentials
- * **Near-shoring:** moving manufacturing and/or assembly closer to the location of demand (where the products are consumed)
- * **Right-shoring:** optimizing supply chain to take advantage of cost and necessary resources (skills and infrastructure) for the best overall margin performance and customer satisfaction

Manufacturing Sourcing Strategies



Note: Multiple responses were allowed.

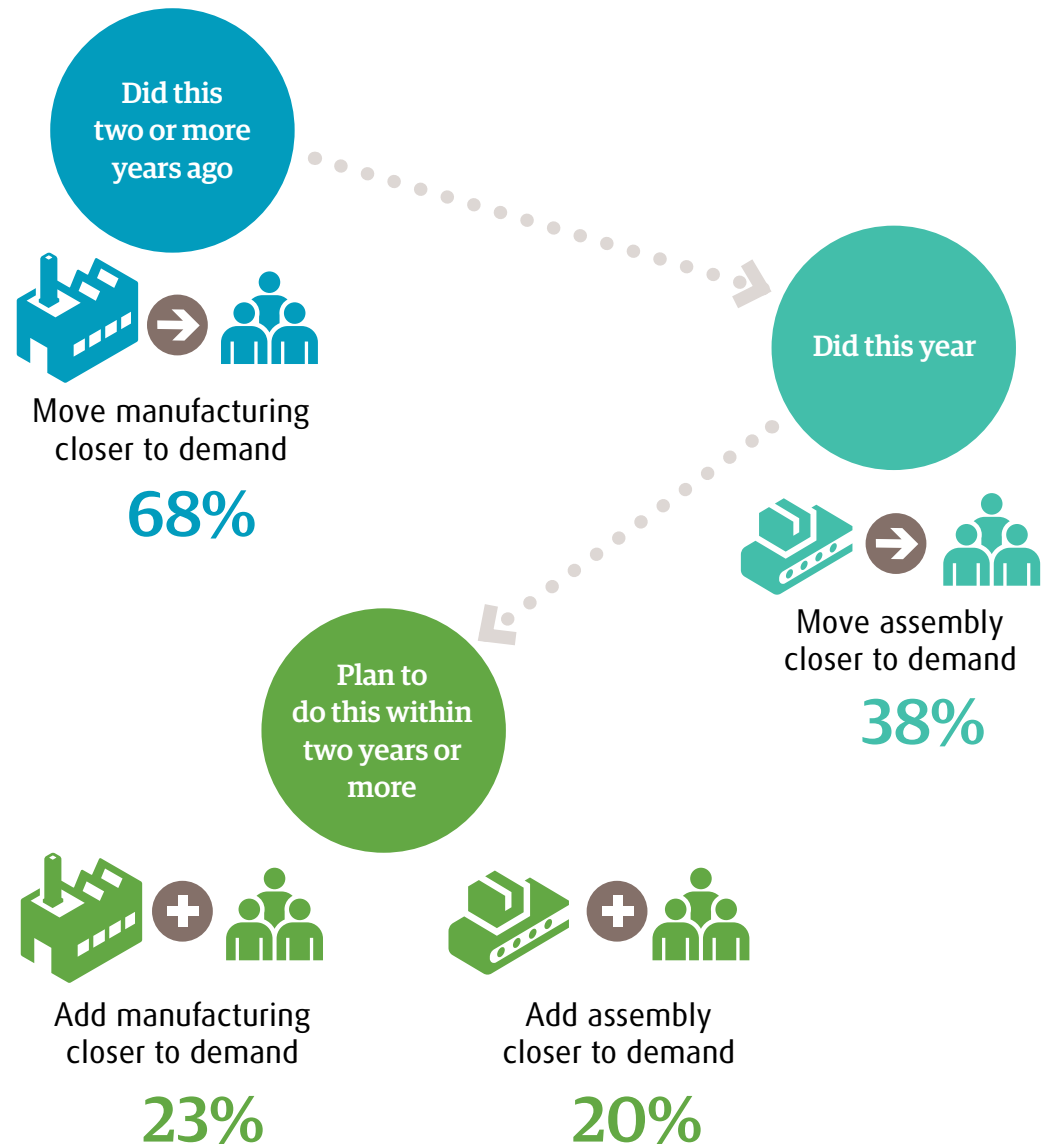
SHORING STRATEGIES: THE RIGHT MIX?

Near-shoring tactics evolving

While high-tech companies are using a mix of shoring strategies, near-shoring is an area to watch in terms of its growth as a high-tech supply chain strategy. This year's survey found that 35% of high-tech logistics decision makers globally are planning on near-shoring — up 25 percentage points from 2010.

Shoring tactics have changed over time from moving manufacturing/assembly to adding manufacturing/assembly. Two years ago, 68% of companies had moved manufacturing closer to demand. This year, the most used tactic was moving assembly closer to demand (38%). Looking forward, companies are most likely to be either adding assembly (20%) or adding manufacturing (23%).

Near-Shoring Approach: Past, Present & Future



SHORING STRATEGIES: THE RIGHT MIX?

Near-shoring drivers and barriers

Improving service levels remain a top priority for high-tech executives with 70% citing this as the main driver behind their near-shoring strategy. This signals the customer-centric focus of the high-tech supply chain. Other top drivers are improving control over quality and intellectual property followed by manufacturing diversity.

While near-shoring drivers have remained consistent over the past year, the barriers to near-shoring are shifting. Location of key suppliers is the current top barrier to near-shoring. In 2013, the top barrier was the benefit of low-cost manufacturing, which has dropped to the fourth-highest barrier today.



Drivers of Near-Shoring

■ 2014 ■ 2013

Improving service levels by bringing production closer to demand



Improving control over quality and intellectual property



Diversification of manufacturing due to natural and socio-economic risks



Cost benefit of China or other low cost manufacturing is no longer compelling



Barriers to Near-Shoring

■ 2014 ■ 2013

Location of key suppliers



Fixed infrastructure is not moveable



Current sourcing footprint best supports expected global demand demographics



Cost benefit of China or other low cost manufacturing remains compelling



EMERGING MARKETS: THE NEXT FRONTIER

Growth opportunities remain in emerging markets

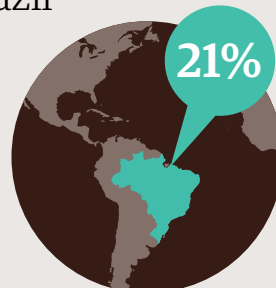
High-tech companies are aggressively expanding in emerging markets, especially Asia, with 71% already in China, 45% in India and 45% in other Asian markets. Many of the markets once considered emerging have now emerged, yet growth opportunities remain. In the next year, the three top emerging markets high-tech companies are planning to enter are Brazil (21%), Russia (20%) and India (20%).

Emerging Markets: Now and Future

| | We are already there | Enter within the next year |
|------------|----------------------|----------------------------|
| CHINA | 71% | 6% |
| INDIA | 45% | 20% |
| OTHER APAC | 45% | 19% |
| MEXICO | 43% | 8% |
| BRAZIL | 42% | 21% |
| RUSSIA | 31% | 20% |
| AFRICA | 26% | 8% |

The top 3 countries companies plan to enter within the next year

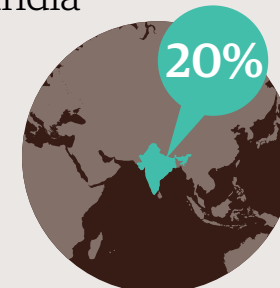
Brazil



Russia



India



EMERGING MARKETS: THE NEXT FRONTIER

Regulatory environment a top challenge

As high-tech companies gain ground in emerging markets, barriers to expansion have evolved. In 2013, the top barrier to expansion in emerging markets was understanding the appeal of products in new markets, cited by 19% of high-tech executives surveyed. This year, navigating the regulatory environment overtook the top spot with 35% of respondents citing this as a top barrier.

Regulations have become a bigger barrier to entering emerging markets. In 2013, only 10% of companies listed navigating the regulatory environment as a top barrier to global expansion.

Top 3 Regulatory Concerns



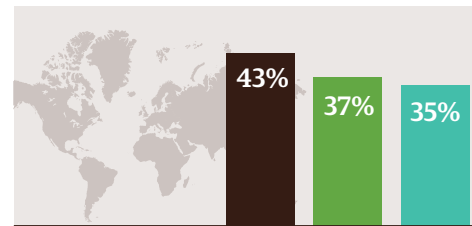
Meeting Regulatory Requirements



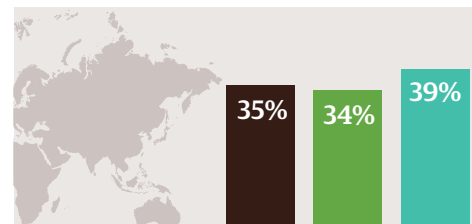
Country-Specific Trade Requirements



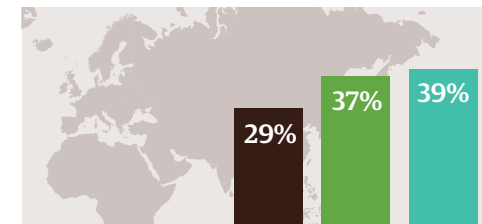
Understanding Free Trade Agreements and Government-Sponsored Trade Initiatives



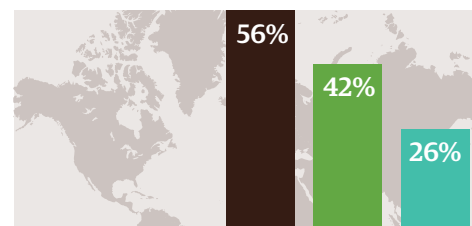
TOTAL



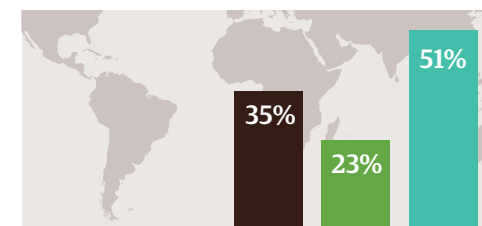
Asia Pacific



Europe



North America



Latin America

EMERGING MARKETS: THE NEXT FRONTIER

External expertise helps overcome challenges

Although there are barriers to entering emerging markets, logistics service providers can help companies overcome the challenges.

From help with alleviating import/export processes to the ability to leverage existing in-country infrastructure and capabilities, partnerships with logistics providers can help high-tech companies capture new global market opportunities.

Logistics partnerships can help high-tech companies enter new markets and expand in existing markets without having to invest in their own resources and infrastructure. This approach allows companies to maintain a flexible supply chain as they continue to expand their global presence.

Needs From Logistics Providers



28%

Managing the customs process



22%

In-country warehousing, distribution and transportation presence



14%

Web-based shipment processing systems



13%

Understanding of country-specific rules



10%

Providing best practices

RISK MANAGEMENT: STRATEGY AND EXECUTION

There's room for improvement in risk management

High-tech companies prioritize risk assessment and almost half see themselves as leaders in this area. However, less than one-third see themselves as leaders in the other areas of risk management: response execution; risk mitigation and response planning; and event management and coordination. The data suggests that executives aren't necessarily prepared to address these areas.

When asked about top areas of concern, survey respondents cited financial flow (20%) and regulatory complexity (19%). Financial concern levels may be driven by recent cybersecurity breaches.

Companies need to look beyond the risk assessment phase to ensure that their supply chains are prepared to take action in the event of a crisis. One action companies are already taking is purchasing third-party insurance, with 35% of respondents saying their company either already had insurance or was looking into it and 26% more saying they thought insurance was a good idea.



| | Leader | Fast Follower | Average | Laggard |
|---------------------------------------|--------|---------------|---------|---------|
| Risk Assessment | 49% | 25% | 21% | 6% |
| Response Execution | 31% | 29% | 23% | 17% |
| Risk Mitigation and Response Planning | 26% | 41% | 24% | 9% |
| Event Management and Coordination | 24% | 36% | 29% | 12% |

RISK MANAGEMENT: STRATEGY AND EXECUTION

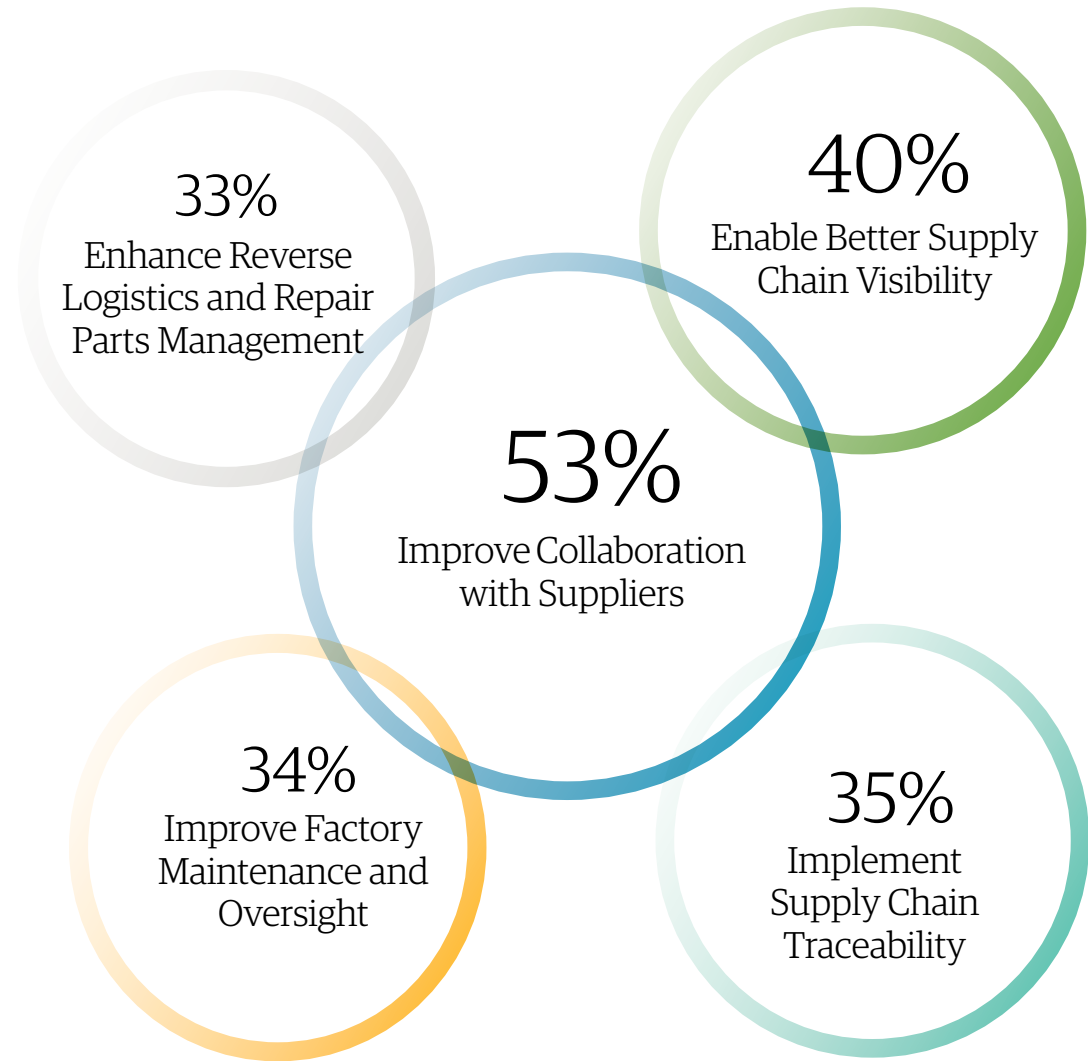
High-tech companies investing in risk management

High-tech companies are actively employing multiple strategies to mitigate and manage future risk in their supply chain. The top two strategies are improving collaboration with suppliers (53%) and enabling better supply chain visibility (40%). Other strategies given a top three priority rating by respondents include implementing supply chain traceability, improving factory maintenance and enhancing post sales management.

There are regional differences. Improving collaboration with suppliers is the top strategy in Latin America (76%) and North America (60%). In Europe, the top choice is enabling better supply chain visibility (52%).

It's critical to take a holistic view of the supply chain and focus on all aspects of risk management from the front end to the back end, making sure not to overlook the returns process.

Global Risk Management Priorities



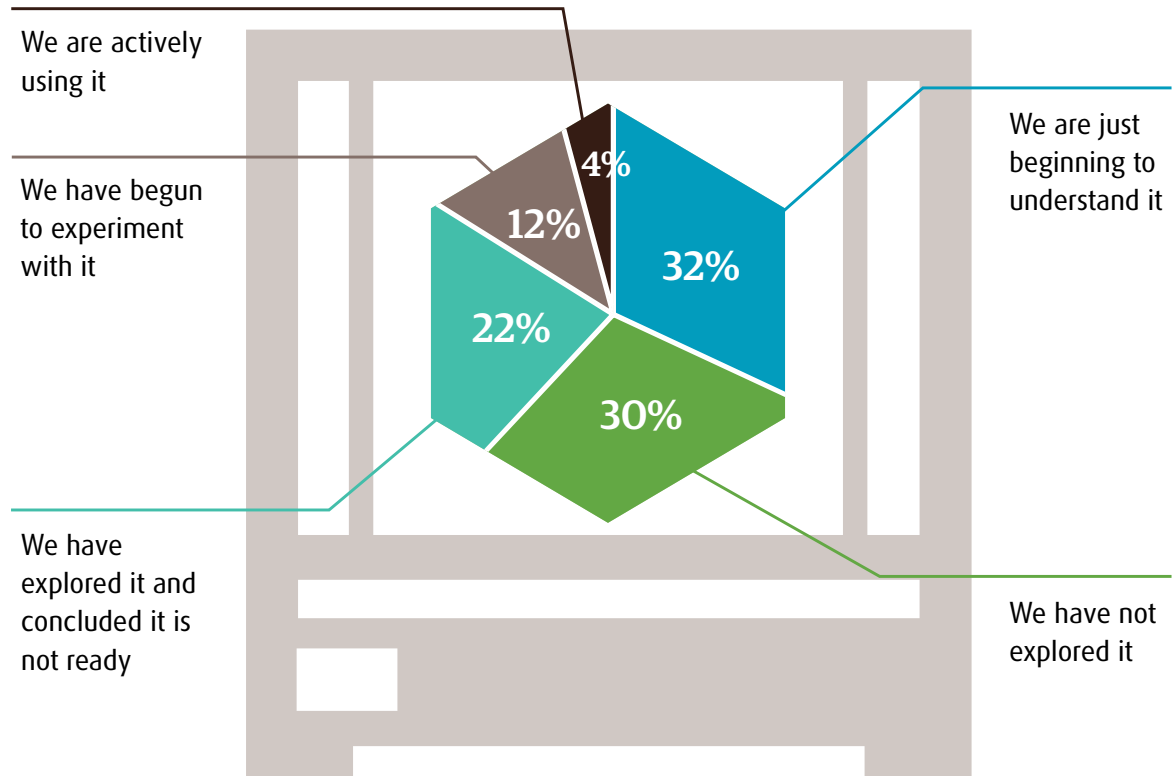
3D PRINTING: FAD OR FUTURE?

3D printing is gaining traction in high-tech

High-tech manufacturers are at the forefront of innovation and 3D printing is among the latest areas gaining traction in the industry. Seventy percent of survey respondents report having hands-on experience with 3D printing.

Globally, survey respondents are using 3D printing to help in the design process for new products (75%) with top benefits including faster product development and a faster manufacturing process. Driven by China at 50%, APAC is using 3D printing more for production purposes than North America (29%).

Role of 3D Printing in Your Business



How are you using 3D printing?



**SUSTAINABILITY:
A CUSTOMER-FOCUSED
BUSINESS PRACTICE**

Sustainability leads to high-tech business gains

Sustainability has a clear business impact on high-tech companies. The top two drivers of sustainability for high-tech companies are cost reduction (73%) and meeting customer demands (71%).

When asked their views on sustainability, high-tech executives have differing views based on their location. Executives see sustainability first as important to core values in Latin America (77%) and Asia Pacific (61%). In Europe, executives view sustainability first as a strategic business imperative (69%).

Customers are driving a significant amount of the sustainability focus in Europe and North America, where 68% and 56% of high-tech executives cite customer demand as a reason they pursue sustainability initiatives.

Key Drivers of Sustainability

