

GLOBAL COLD CHAIN ALLIANCE INDUSTRY TRENDS REPORT

Driving Value and Harnessing Opportunity
Across the Cold Chain | April 2020

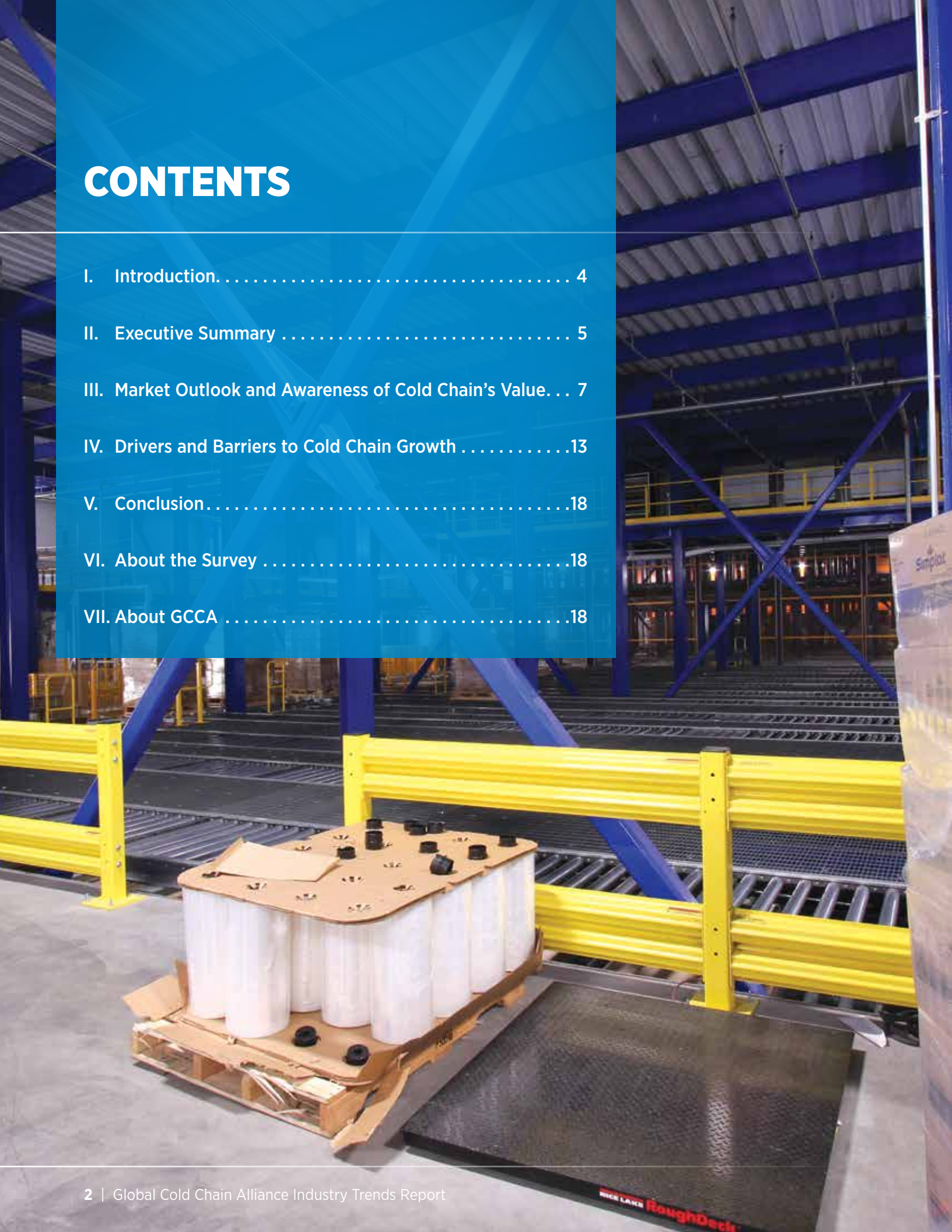


GLOBAL COLD CHAIN
ALLIANCE®

Results and findings from a survey conducted by GCCA of companies representing the temperature-controlled warehouse and distribution industry.

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INTRODUCTION

Since GCCA collected data from cold chain stakeholders about how they see the market for the cold storage industry, the world was greatly impacted by the COVID-19 pandemic. Underlying market conditions influencing how the industry is perceived will undoubtedly shift, though how they will do so is not clear at this time. However, many of the operational and market challenges and opportunities identified in this survey will still be relevant.



EXECUTIVE SUMMARY

The Cold Chain Industry Faces the Future with Optimism

In research on trends that impact the cold chain industry and its stakeholders, the Global Cold Chain Alliance (GCCA) finds cold chain operators and related business leaders extremely optimistic about the future of the cold chain industry and their individual businesses.

Specifically:

- Two-thirds of respondents believe that market conditions today are better than five years ago.
- Nearly all respondents expect that cold chain will continue to grow over the next five years.
- Most believe that their companies will be more successful in the next five years.

Developing opportunities

While market conditions for the cold chain are better than five years ago, there is opportunity to more closely align all cold chain players — including 3PLs, food companies, retailers, suppliers, and transportation and logistics — to address challenges and to grow market demand. While one half of the refrigerated warehouse professionals responding gave the industry high marks, a quarter perceive the cold chain industry is not sufficiently aligned to address challenges and meet market demand. Improving alignment throughout the cold chain to grow demand is a principal mandate for industry executives, and GCCA.

EXECUTIVE SUMMARY

Drivers and Barriers to Market Growth

Survey respondents said the following changing market dynamics and opportunities have significant potential to influence future industry growth:

1. Use of automation and robotics
2. Increased demand for food as a result of global population growth
3. Growth of e-commerce
4. Diversification of temperature-controlled products in the food industry
5. Replacement of old assets with new, modern warehouses
6. Demand for data and predictive analytics
7. Global trade expansion
8. Changing consumer food preferences

While cold chain industry leaders remain optimistic, survey respondents identified operational challenges that limit business growth and potential. The most significant barriers are:

- Workforce and driver shortages
- Difficulty balancing increased demand and cold storage capacity as a limited resource
- Customers building and managing their own facilities (insourcing)

Digging deeper into the results, most respondents cited recruiting, training, and retaining workers as the top issue facing their company. The survey indicated that talent and labor issues are felt more by larger companies located in the United States than smaller companies and those located outside the United States. Because workforce development can advance all cold chain stakeholder companies as well as refrigerated warehouse professionals, it is viewed as an immediate and actionable priority for the industry and its stakeholders.

Among top concerns for losing business, insourcing and insufficient local capacity were cited most often aside from price. Price is one of the top three reasons they lose business, but it was mentioned significantly less than the 2014 survey. However, the number of respondents citing insourcing and capacity issues increased. In addition, survey respondents noted that customers continue to demand more complex services without a willingness to pay higher prices, placing significant pressure on 3PLs companies to deliver.

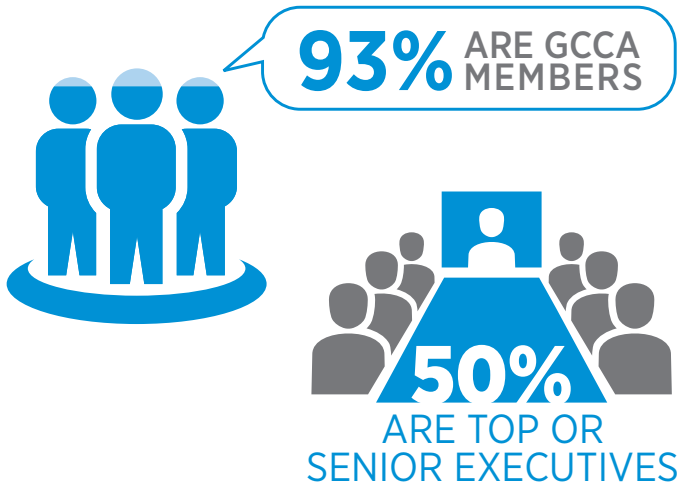
Overall, results of the Global Cold Chain Industry Impact Research paint the picture of a dynamic and thriving industry. Stakeholders are optimistic about the future however recognize that more needs to be done to ensure sustainable growth. The foundational element of long-term growth is Industry alignment bringing 3PLs, food companies, retailers, suppliers, and transportation and logistics companies into greater alignment of challenges and priorities is essential capitalizing on market demand.

EXECUTIVE SUMMARY

Profile of Responding Industry Stakeholders

Profile of Industry Stakeholders Responding to the Survey. The survey was sent to GCCA members and prospective members from refrigerated warehouses.

182 TOTAL RESPONDENTS



48% WORK IN LARGER COMPANIES WITH MORE THAN 10 MILLION CUBIC FEET

Key Survey Findings

Industry stakeholders are extremely optimistic about the future of cold chain.

Drivers and Barriers to Growth

- 86%** are challenged by customers demanding more complex services without price increases
- 85%** indicate talent and labor issues impact their businesses
- 54%** list price as the most common reason they lose business
- 51%** see workforce and driver shortages as the greatest challenge
- 43%** believe automation and robotics present the best opportunities for the cold chain industry
- 37%** believe increased demand for food, as global population grows drives opportunity

MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

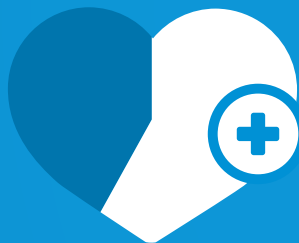
Respondents are very positive about the future of the cold chain industry and the ongoing success of their own companies.

67% BELIEVE
MARKET CONDITIONS
FOR COLD CHAIN ARE BETTER
TODAY THAN **FIVE YEARS AGO**

20% GIVE THE INDUSTRY
AN A FOR ALIGNMENT



IN COMMUNICATING
THE VALUE AND
IMPORTANCE OF
COLD CHAIN



64% BELIEVE THEIR CUSTOMERS
UNDERSTAND THE IMPORTANT ROLE
COLD CHAIN PLAYS IN FOOD SAFETY



90%
BELIEVE THEIR
COMPANIES
WILL BE **MORE**
SUCCESSFUL
IN THE NEXT
FIVE YEARS

93% BELIEVE
THE INDUSTRY WILL
GROW IN THE NEXT
FIVE YEARS

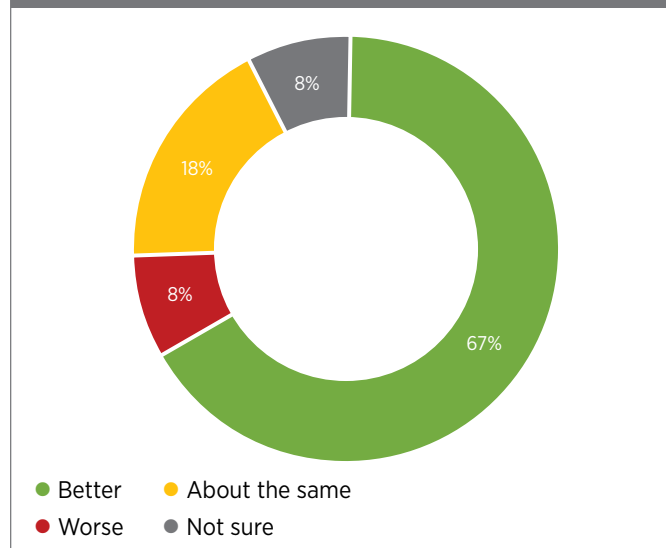
MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

Market conditions for the cold chain are better today than five years ago.

The global cold chain industry is growing at an exceptional rate, and survey respondents are directly experiencing this growth. With strong compound annual growth rates, the cold chain industry is benefiting from economic, market, and regulatory trends that influence the production, supply, and demand for temperature-sensitive products. The most notable trends include:

- Low interest rates, which encourage participation in the industry and investment in cold storage construction and advanced technologies. These capital investments increase capacity, drive efficiency, and reduce costs.
- Increased investment in agricultural food production, which includes innovative and efficient cold chain systems and facilities that reduce food loss and waste.
- Much higher demand for frozen foods. The American Frozen Food Institute estimated that 99.4 percent of U.S. households regularly purchased frozen foods in 2018. This trend is likely to continue for more than the near future. Consumers, especially millennials with children demand frozen foods for their convenience, health, quality, taste, and value.
- Increased focus on food safety by regulators is a major factor moving forward. While compliance with more stringent regulations creates stress in the industry, it also increases the demand for cold storage facilities that can meet and exceed food safety standards.

Figure 1. Compared to five years ago, would you say the market conditions for the cold chain industry today are better, worse, or about the same?



MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

Optimism extends into the future with almost every survey respondent indicating the industry will grow in the next five years.

While survey respondents believe the growth trend will continue, they are more conservative than most market analysts. Only 37 percent of respondents believe that the industry will grow substantially. Compared to market analyst Allied Market Research, who predicts that the global cold chain market will experience a significant expansion.

Optimism reflects respondent experience. Respondents expect their companies to be more successful in the next five years than they are today.

Although respondents are more conservative about industry growth than market research analysts, they are extremely optimistic about their own companies' prospects. An overwhelming majority of respondents believe that their companies will be more successful in the next five years than they are today. Not only does this reflect an understanding of the market conditions, it reflects confidence in their own operations and investments.

Figure 2. In the next five years do you expect the cold chain industry to:

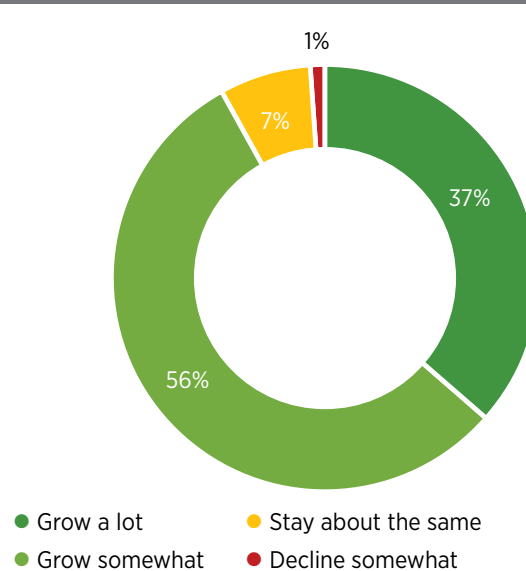
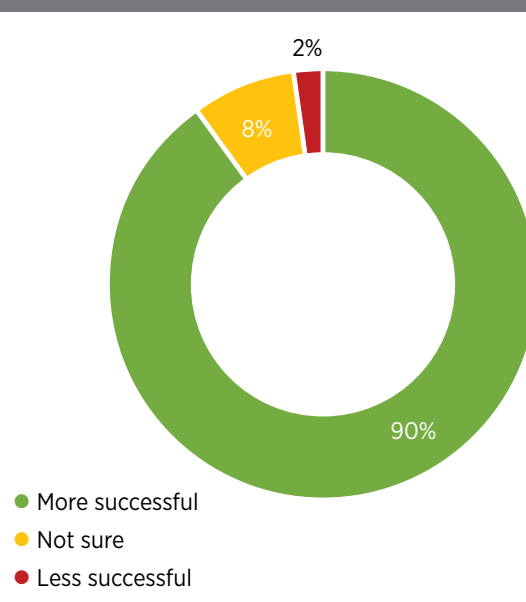


Figure 3. In the next five years, do you expect your company to be more successful, less successful, or stay about the same?



MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

Market awareness of the critical role cold chain plays in protecting a company's food safety is an opportunity.

Food companies are under increased pressure to protect their brands and cold chain providers must ensure food safety at all levels of the supply chain for their customers. This sentiment echoes the results of GCCA's 2018 "Cold Chain Customer Research Report."

Customer understanding of the vital role cold chain systems and facilities play in protecting their companies' food products is perceived to be an opportunity. While 64 percent of respondents strongly agree that customers think the cold chain plays an important role in food safety, that leaves 36 percent of customers not fully appreciating cold chain's role. This data underscores a finding from the 2018 "GCCA Cold Chain Customer Research Report," which directly polled the customers of GCCA members. In that case, 76.51 percent of respondents strongly agreed or somewhat agreed that their cold chain providers play a significant role in their companies' food safety.

The industry is credited for its efforts to communicate the value and importance of cold chain. There is clear opportunity to move from "good" to "great" through better industry alignment.

While 93 percent of respondents believe their customers understand the important role of the cold chain in food safety, only 79 percent believe that the industry is doing a great or good job communicating the value and importance to customers. Cold chain providers are on the frontline when it comes to communicating value and importance to customers. However, the importance of the cold chain industry is not yet fully appreciated by business at large. Therefore, respondents clearly believe that the industry can do more to ensure that all players are aligned on how cold chain delivers value with respect to achieving food safety.

Figure 4. How much do you agree or disagree with this statement: "My customers think the cold chain plays an important role in their company's food safety?"

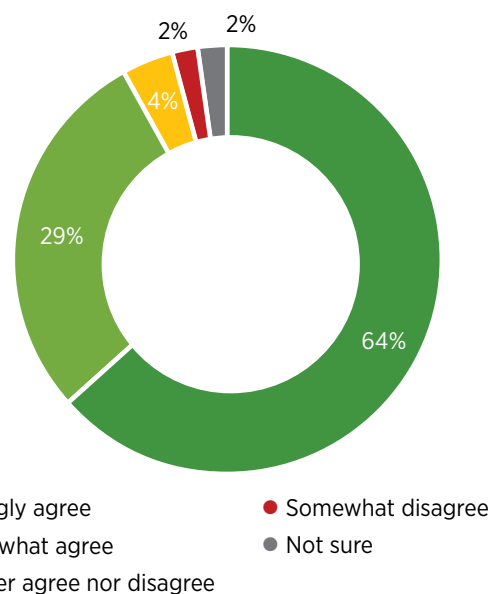
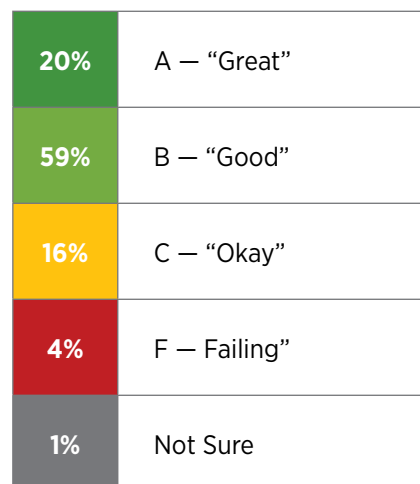


Figure 5. What letter grade would you give to the cold chain industry on its efforts to communicate the value and importance of the cold chain to customers?



MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

Cold chain industry players are somewhat aligned, but there is room for improvement to better support market growth.

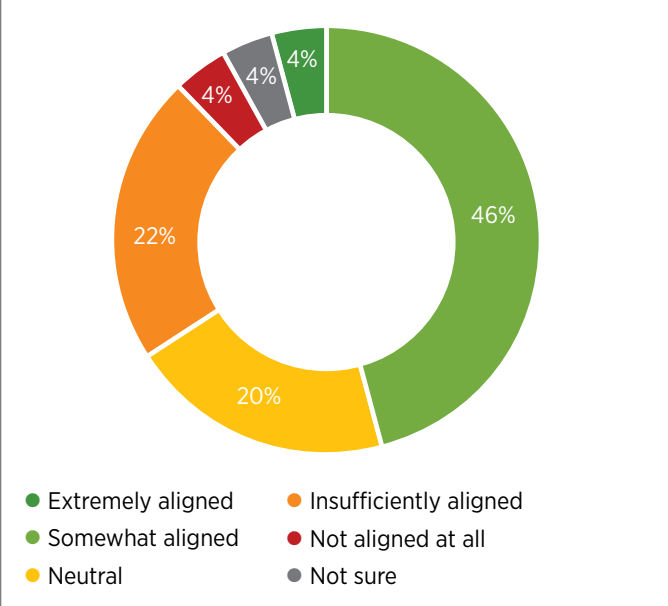
The strong economic outlook of the cold chain industry can be achieved when all players are aligned to meet demand. For example, only 50 percent of respondents believe that all parties in the cold chain are currently aligned. Interestingly, when asked a related question, participants in the “Cold Chain Customer Research Report” were more positive about alignment with their providers; 75.54 percent of customers perceive their primary cold chain provider to be aligned with their services. Providers and customers must work toward greater collaboration and goal-sharing to enable success.

While this research did not focus on alignment challenges, we know from the customer research conducted in 2018 that there are many examples of opportunities for increased alignment.

First, many third-party logistics providers are viewed as a commodity. Customers perceive them as a pallet position for rent, and not necessarily as an extension of their brand. When viewed as a cost center driving up the cost of goods, one can understand why alignment can be improved.

There are many opportunities for the industry to differentiate the value offered to food companies. The important role cold chain companies play in food safety will be discussed later, but was identified as the biggest opportunity to more closely align the industries.

Figure 6. How aligned do you think all parties in the cold chain — 3PLs, food companies, retailers, suppliers and transportation — are in addressing challenges and growing market demand?



MARKET OUTLOOK AND AWARENESS OF COLD CHAIN'S VALUE

Second, greater opportunities exist for efficiencies in distribution. Food processors deliver product to the same customer, such as a foodservice or retail distribution centers. Too often these processors are managing their forward warehousing or transportation independently, missing opportunities to save on logistics cost by allowing products to ride on the same truck. Customers are overcoming the obstacle of sharing transportation which positions the 3PL industry at the center of the supply chain, facilitating opportunities for collaboration.

Furthermore, various modes in the supply chain are not always communicating effectively. Retailers, trucking companies, warehouses, distribution centers, and foodservice companies all have their own logistics operations that operate in silos. Warehouses may have strong communication with their customer, the food processor, but the logistic decision makers for the retailers may not be in the communication loop. For example, retailers that have implemented OTIF policies may not be aware of how those policies have created challenges across the supply chain. Alignment scores could improve with all parties in the supply chain communicated more and worked more closely to achieve objectives.

Third, there can sometimes be alignment conflict with financial objectives of cold chain providers and their customers. It has been perceived by some customers that their cold chain providers are making high profit margins, while they are facing pressure to reduce costs to maintain narrow margins. Customers have cited this discrepancy as a reason for misalignment of objectives and partnership.

There are other examples alignment, but these are a few notable cases where this score could increase.

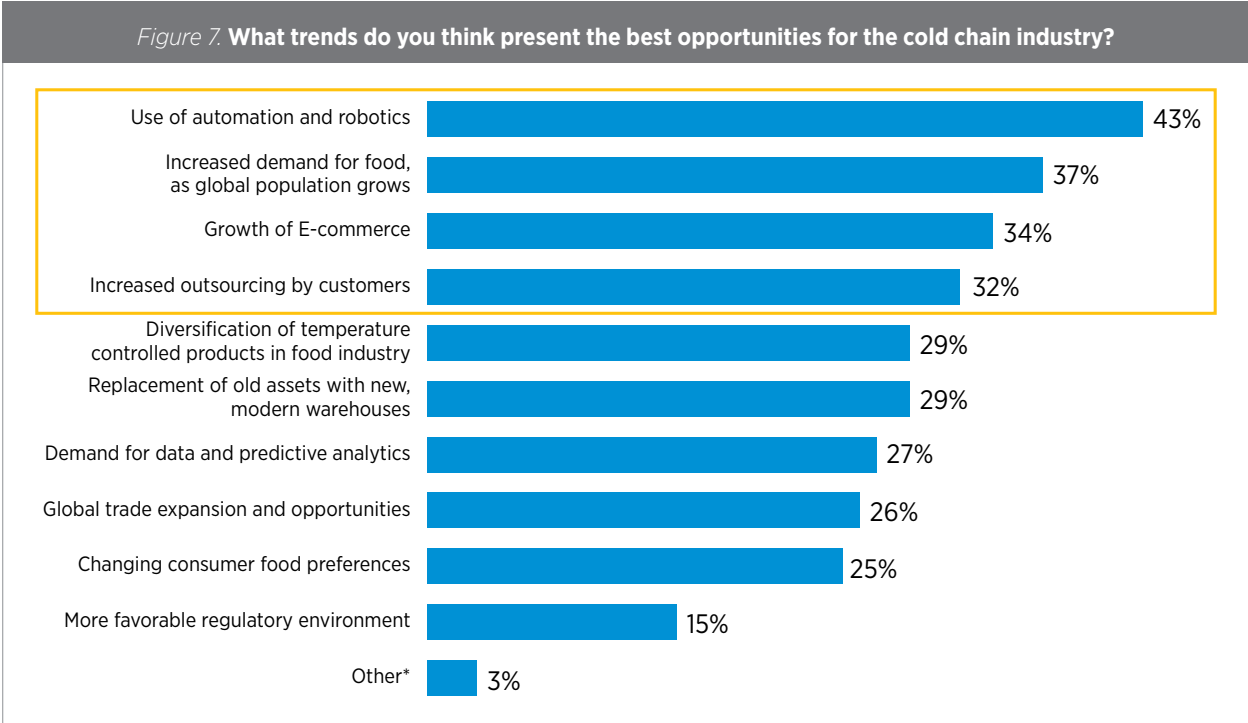


DRIVERS AND BARRIERS TO COLD CHAIN GROWTH

While respondents are optimistic that advanced technology may mitigate labor shortages in the future, finding front-line workers remains the most pressing challenge today.

- 37%** believe increased demand for food, as global population grows drives opportunity
- 43%** believe automation and robotics offer the best opportunity for the industry
- 51%** recognize labor and driver shortages present the greatest challenge to the industry
- 54%** indicate price is the most common reason they lose business to competitors
- 85%** see customer demands for more complex services without price increases and recruiting, training, and retaining labor as the industry issues making the greatest impact on their companies

DRIVERS AND BARRIERS TO COLD CHAIN GROWTH



Automation and robotics offer the best opportunity for the industry to increase capacity. Market expansion dynamics include global population growth, e-commerce, and greater outsourcing.

The adoption of advanced technologies has the potential to revolutionize the cold chain industry not only by increasing capacity and throughput but also by mitigating its labor shortages. However, the warehousing and storage industry in general, and 3PLs more specifically, have been hesitant to adopt new technology. Most cold storage operations have a large number of customers whose demands are constantly changing. Plus, with varying product movement, inventory, and distribution, food producers must

be dynamic to meet customer demand. Designing highly-automated facilities for a specific customer profile directly conflicts with the dynamic nature of the industry. Longer-term contracts or commitments can provide one solution.

Global population growth, the continued rise of e-commerce, and continued adoption of facility and staffing outsourcing as a desired business model are positive trends that support the optimistic outlook for the cold chain industry. However, each requires adequate capacity to meet customer demands. Of respondents, 43 percent recognize the role technology will play in the continued growth of the cold chain industry.

DRIVERS AND BARRIERS TO COLD CHAIN GROWTH

Labor shortages present the greatest challenge and potential barrier to growth, followed by the difficulty of balancing demand and capacity and insourcing.

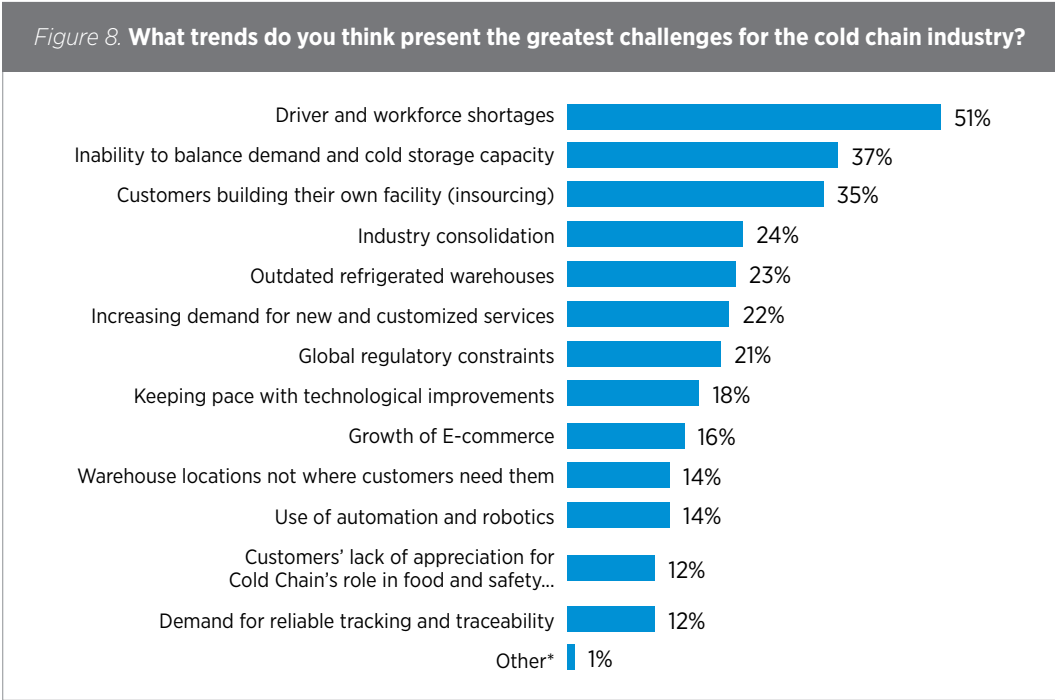
Shortages in the cold chain workforce are a significant challenge. While technology has the potential to reduce the demand for certain types of labor, it also creates higher-skilled jobs that also could go unfilled.

In the meantime, among competing 3PLs, talent becomes increasingly important. With the total demand for labor increasing, the challenge is not only finding, but educating and retaining skilled workers. The cold storage industry has further challenges compared to its warehousing counterparts because of the harsh conditions in which associates have to work, often spending up to an hour in -18 F temperatures.

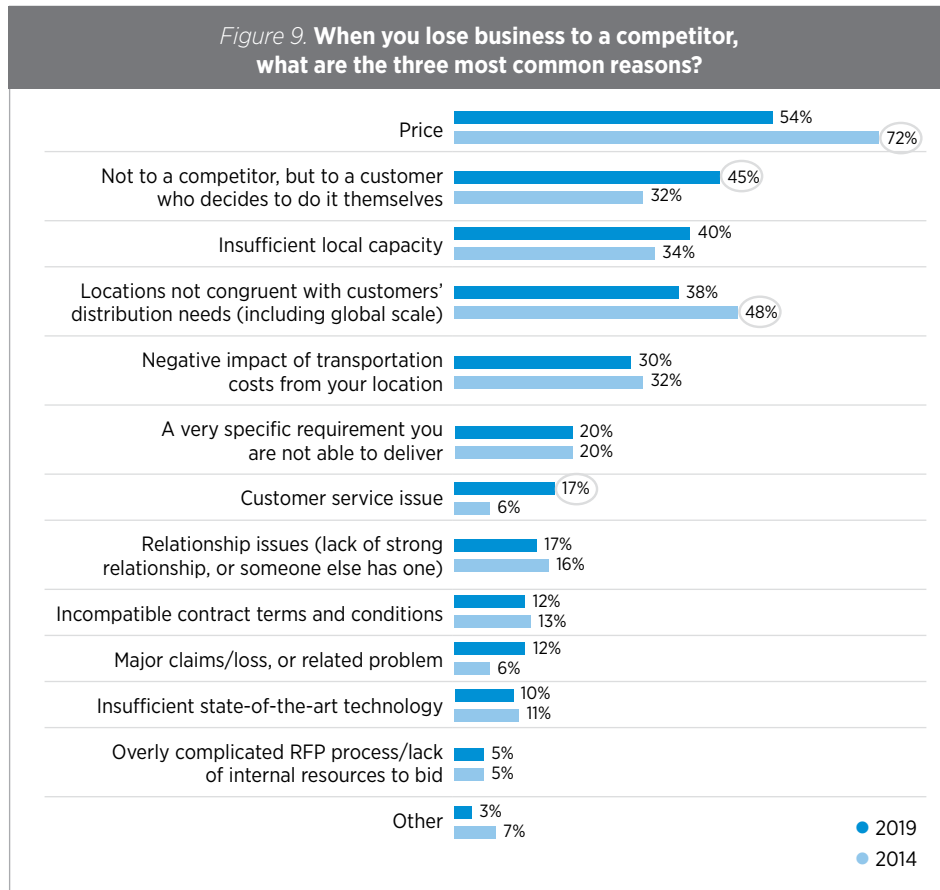
GCCA's 2019 Employee Turnover study showed turnover rates for the industry averaged 32.6 percent.

Cold storage operators do have an opportunity to differentiate themselves, however, from labor competitors. They tell a compelling story of feeding the world. Many companies already are investing in this message to new recruits. Industry leaders also focus on onboarding, because most turnover tends to happen within the first two weeks of employment.

The labor market also is an advantage for the industry in that it perpetuates the need for customers to outsource operations. Those customers are equally having a difficult time hiring associates to work in a freezer environment, thus, it makes more sense for them to outsource those functions, deflecting the challenge to third-party operators.



DRIVERS AND BARRIERS TO COLD CHAIN GROWTH



Price continues to be the main reason business is lost to a competitor, however the number of respondents citing insourcing and insufficient capacity has increased over the last five years.

The top industry challenges cited by respondents reflect their direct experience competing for business in today's market. Comparing results from 2014 to 2019, price sensitivity remains the most common reason companies lose business. These findings are consistent with GCCA's past customer research, in

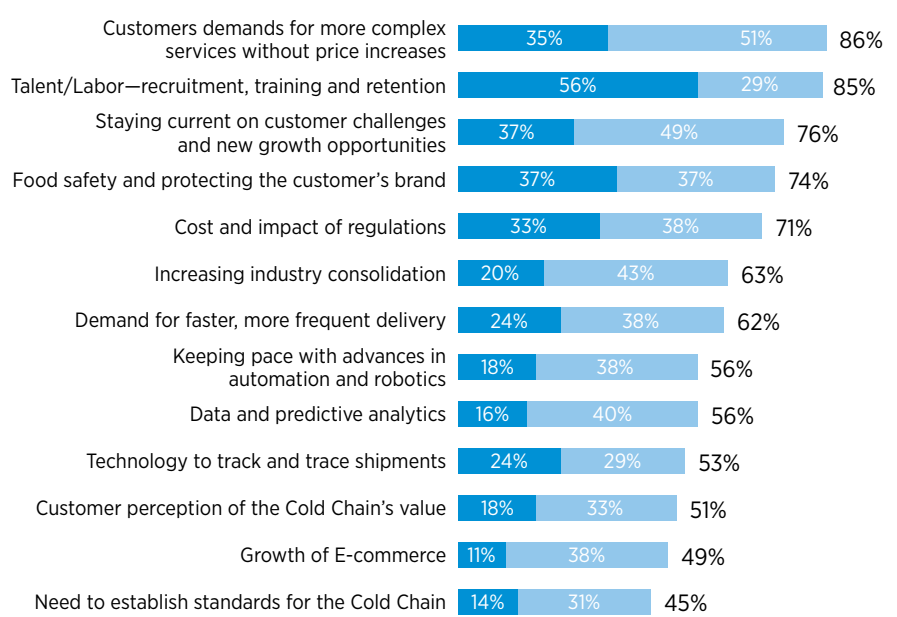
which CEOs and C-Suite Executives selected "Pricing" and "Customer Service" as the biggest factors in selecting a cold chain provider, and 39 percent cited it as the most common factor to cease working with a cold chain provider. However, it should be noted, losing business to a customer that decides to insource is now the second most-cited reason, jumping up from fifth in 2014. The nature of outsourcing contracts puts a significant burden on providers to create value in a relatively short period, increasing value over time.

DRIVERS AND BARRIERS TO COLD CHAIN GROWTH

Demands for more complex services without higher prices and talent/labor issues are the industry forces making the greatest negative impact on respondents' companies.

Companies in the cold chain continue to address alignment. Staying current with customer challenges and working to fulfill their roles as an extension of their customers brands are critical to contract retention and value.

Figure 10 and 11. Thinking about the many issues facing companies in the cold chain, how much impact does each of the following have on your own company?



	Job Title		Company Size	
	Top/Senior Executives	Other Professionals	Larger Companies	Smaller Companies
#1 Rated	Talent/Labor	Demand for more complex services without price increases	Talent/Labor	Demand for more complex services without price increases
#2 Rated	Demand for more complex services without price increases	Talent/Labor	Demand for more complex services without price increases	Staying current on customer challenges, opportunities
#3 Rated	Staying current on customer challenges, opportunities	Staying current on customer challenges, opportunities	Food safety and protecting customer's brand	Food safety and protecting customer's brand

CONCLUSION

There is much to celebrate in the strength and resiliency of the cold chain, which has been stress-tested on a scale like it's never known before. Market conditions will likely continue to show growing demand, while both individual and collective operational challenges and barriers to growth may shift somewhat in nature.

We all have a role to play in the strengthening and growth of the post-pandemic role of the cold chain, and as your association of choice, the Global Cold Chain Alliance will continue to do its part. We will work to reduce systemic barriers to cold chain growth and resiliency. GCCA's 2020-2022 strategic plan will

About the Survey

This report summarizes results of a survey conducted by Potomac Core Association Consulting on behalf of the Global Cold Chain Alliance (GCCA) in 2019. The survey was designed to assess the impact of current and future industry trends on cold chain stakeholders represented by GCCA, as well as provide insight

About the Global Cold Chain Alliance

Comprised of its Core Partners, including the International Association of Refrigerated Warehouses (IARW), the World Food Logistics Organization (WFLO), the International Refrigerated Transportation Association (IRTA), and the Controlled Environment

guide our work in mission-critical areas you – our membership – have identified: market research and intelligence, industry promotion, workforce innovation, and advocating for a strong, resilient cold chain.

We'll help you address industry macro-trends identified in this research report – such as the growing role of automation and technology, labor shortages, increased alignment of all cold chain partners, and demands on you to provide even more complex shortages. You'll see programs, products, events, publications, and much more produced to address these challenges. Together, we can strengthen and grow the cold chain to better meet the world's needs.

into the organization's strategic efforts to continue promotion and growth of the cold chain.

The survey was open to members, customers, and prospects of the International Association of Refrigerated Warehouses. A total of 182 individuals completed the survey.

Building Association (CEBA), the Global Cold Chain Alliance (GCCA) represents all major industries engaged in temperature-controlled logistics. GCCA unites all partners to be innovative leaders in the temperature-controlled products industry.

