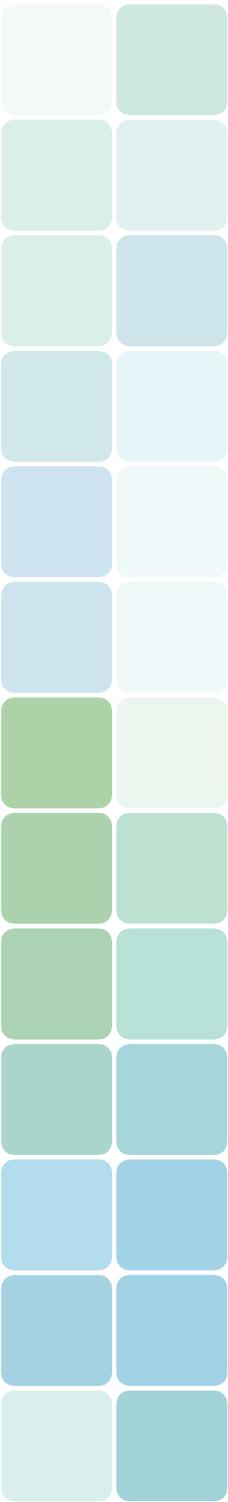




2020 COVID-19 Cold Chain Business Impact Survey Summary



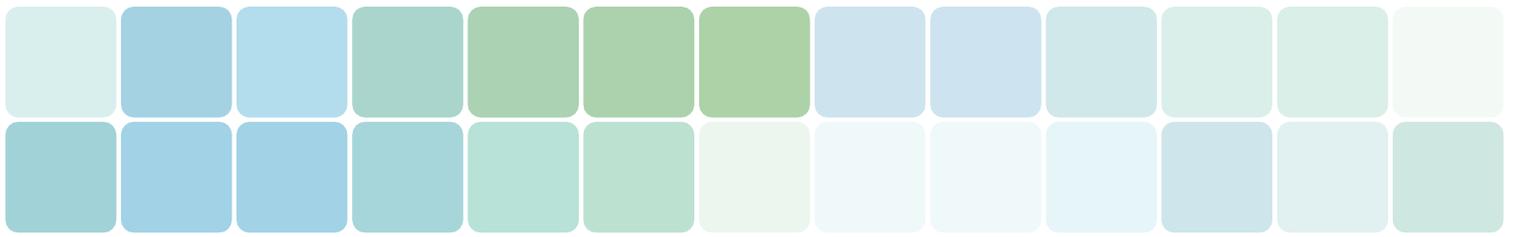
Author

Jason Troendle, the Director of Market Intelligence and Research at the Global Cold Chain Alliance, has a Master of Science in Applied Economics & Management with a focus in Food and Agriculture from Cornell University. Troendle provided oversight about the survey design and authored this Executive Summary. For additional information, questions about the report, or to submit comments or suggestions, please contact Jason Troendle at jtroendle@gcca.org or +1 703 373 4300.

Copyright © 2020 by the Global Cold Chain Alliance All rights reserved.

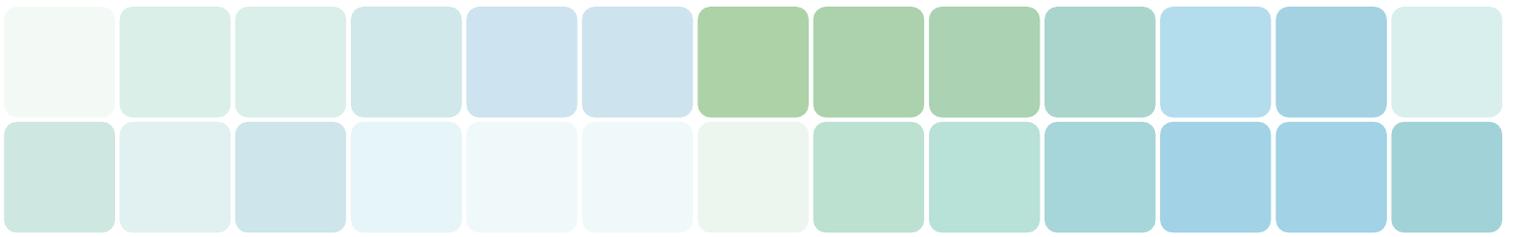
No portion of this work may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without written permission from the copyright holder.

The information promulgated by the Global Cold Chain Alliance is not intended to be a comprehensive resource with respect to the cold storage industry. Although the material has been compiled with care, GCCA and the authors of the manual have not validated all the information contained herein and do not assume any responsibility for its use, accuracy, or applicability. All users of the information unconditionally agree: (1) not to hold GCCA or the authors responsible in any manner or to any extent for the user's action(s) or the consequences of such action(s) relating to the use of the information provided and (2) to indemnify GCCA and the authors for all expenses, fees, costs, damages, awards or other amounts incurred related to or arising from the user's use of the information. As used above, GCCA shall mean the core partners of GCCA, and each organization's directors, officers, employees, volunteers, members, and agents.



Contents

Introduction	4
Respondent Demographics.....	5
Geographic Scope.....	5
Operation Detail.....	5
Business Challenges and Responses	6
Response.....	7
Financial Impact	8
Revenue	8
Government Response	10
Priorities.....	10
Future Outlook.....	11
Business Operations.....	11
Regional Results	13
Business Challenges.....	13
Business Response	14
Financial Impact – Revenue.....	15
Financial Impact – Costs	17
Government Priorities	18
Company Type Results	19
Business Challenges.....	19
Business Response	20
Financial Impact – Revenue.....	21
Financial Impact – Costs	23
Government Priorities	24
Warehouse Size Results.....	25
Financial Impact – Revenue.....	25
Financial Impact – Costs	27
Survey Questionnaire	28



Introduction

On January 30, 2020 the International Health Regulations Emergency Committee of the World Health Organization (WHO) declared the outbreak of the SARS-COV-2 virus, and the disease it causes, COVID-19 (also colloquially called the coronavirus), a public health emergency of international concern. The World Health Organization made the assessment that COVID-19 could be characterized as a pandemic on March 11, 2020 due to the alarming levels of spread and severity.

Since it began, the pandemic has had a ripple effects globally on human life and social and economic activity. Countries, states, provinces, and local communities have implemented various methods to reduce the effects of the virus. Various agencies have made strong efforts to track the effects of the virus related to number of illnesses, deaths, and medical capacities to treat the virus. Less information is available on the economic or operational effect of the pandemic on specific industries.

To help understand the ripple effects of the pandemic on the cold chain industry, the Global Cold Chain Alliance (GCCA) conducted a survey between April 28, 2020 and May 11, 2020. The survey captured qualitative data from all types of GCCA members companies including warehouses, industry suppliers, asset and non-asset-based transportation and construction (design/build/thermal envelope contractors) across the industry.

The survey questionnaire covered 12 questions and had 170 usable responses. A full set of the questions can be found at the end of the document.

GCCA would like to thank those who responded to the 2020 COVID-19 Business Impact Survey. Without the data the members provided, this report would not have been possible. This report is available in full and free of charge for all members and is meant to provide a quick visualization of the data.

Respondent Demographics

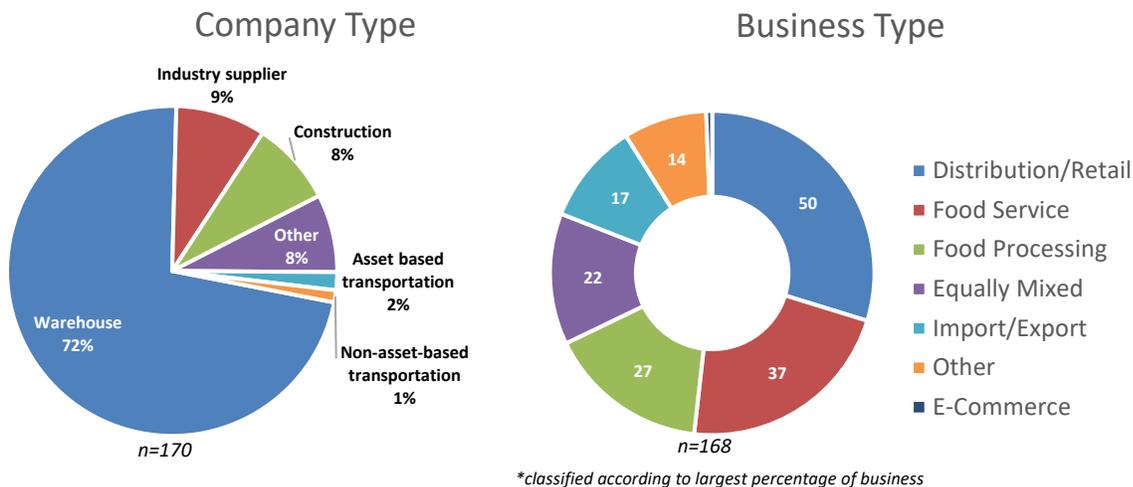
Geographic Scope

Across the 170 responses, 31 countries were represented in the data. Enough observations were gathered to analyze the data across the following regions: United States, Canada, Europe, and Latin and South America.

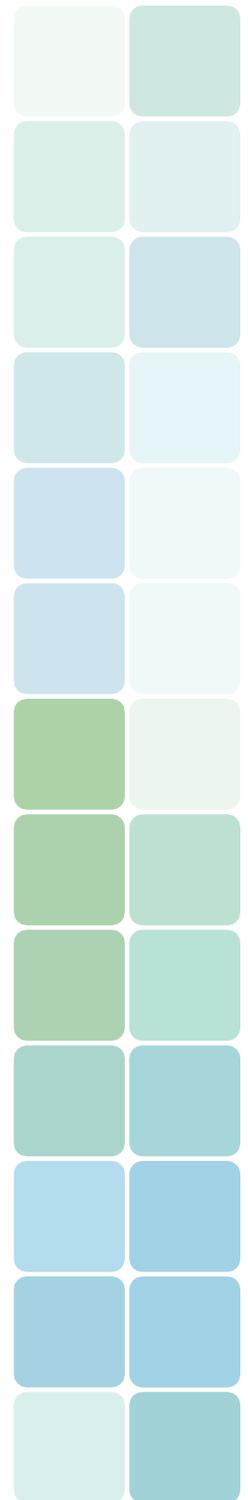


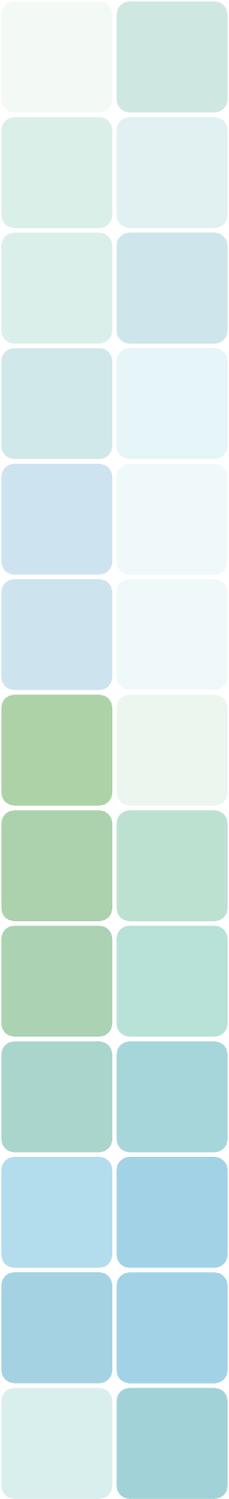
Operation Detail

Respondents identified both their company type and business type. Business type is based on the approximate percentage of business supporting various segments of the cold chain industry.



For those identifying as warehouse companies, approximately 64% had 1-5 warehouse facilities, 24% had 6-20 warehouse facilities, and 12% operated 20+ facilities.





Business Challenges and Responses

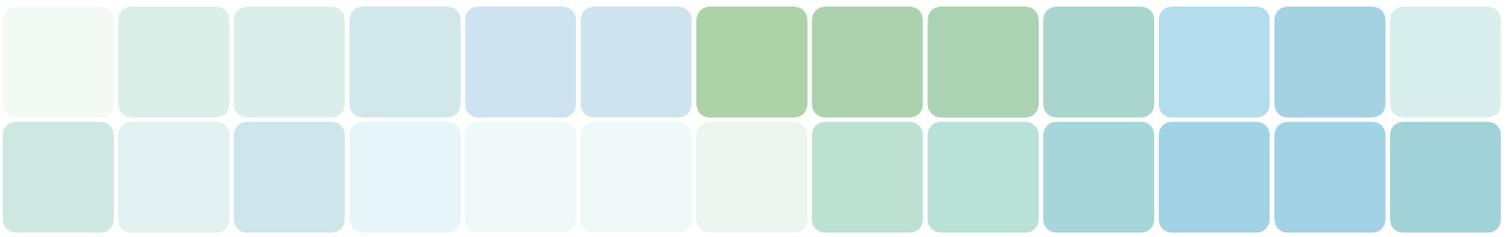
Challenges

The pandemic has caused many challenges that businesses have needed to address and work through. The most frequently selected challenge was supply chain disruptions (e.g. keeping up with demand surge, slowdowns in food service, production/manufacturing challenges) and selected by 87 of 165 respondents. Many of the other top-selected challenges revolved around care of employees and creating the most clean and safe environment for working, including access to personal protective equipment and cleaning supplies.

What are the top three challenges facing your business as a result of the current COVID-19 pandemic?



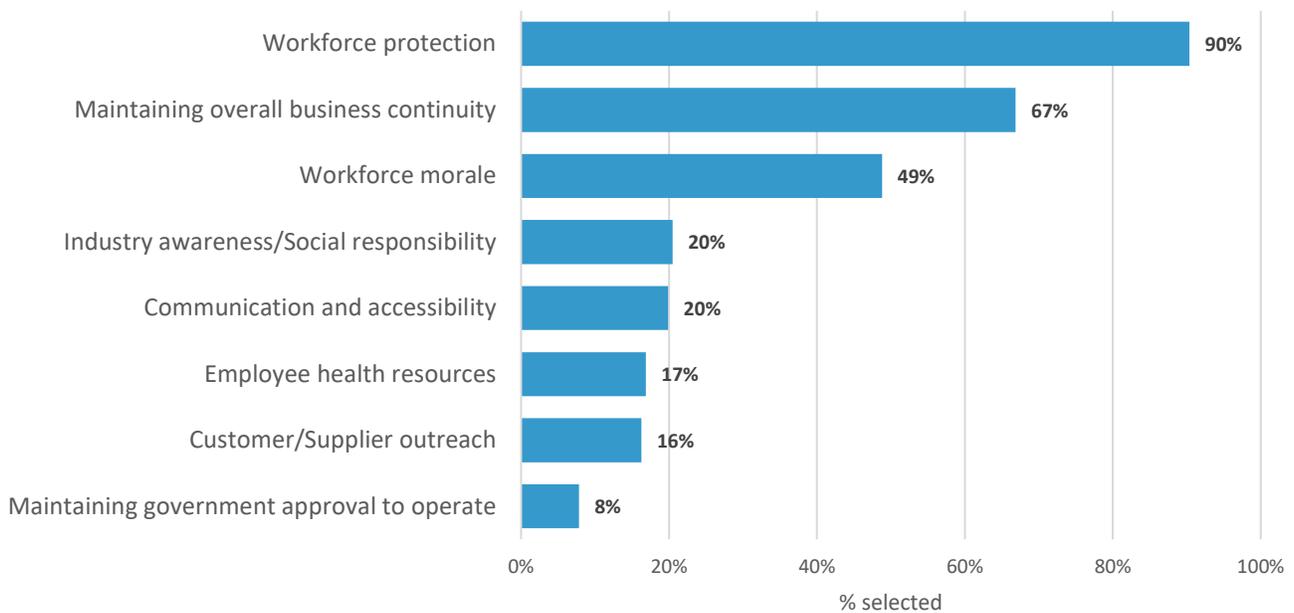
n=172, % do not add up to 100% given respondents can select up to three choices



Response

Responses to the crisis were consistent with the top challenges, with a focus on people, a safe workplace, and maintaining business continuity. The top COVID-19 response, selected by 90% of all respondents, was to take extra measures to protect the workforce (e.g. staggered shifts, social distancing, remote working). The next-highest issues were maintaining overall business continuity and workforce morale (e.g. extra communication, appreciation pay, providing lunch, highlighting individuals/teams on social media platforms, sharing family activities).

Which of the following measures are you prioritizing as a company in reaction to the crisis? *Select the top 3 answers.*

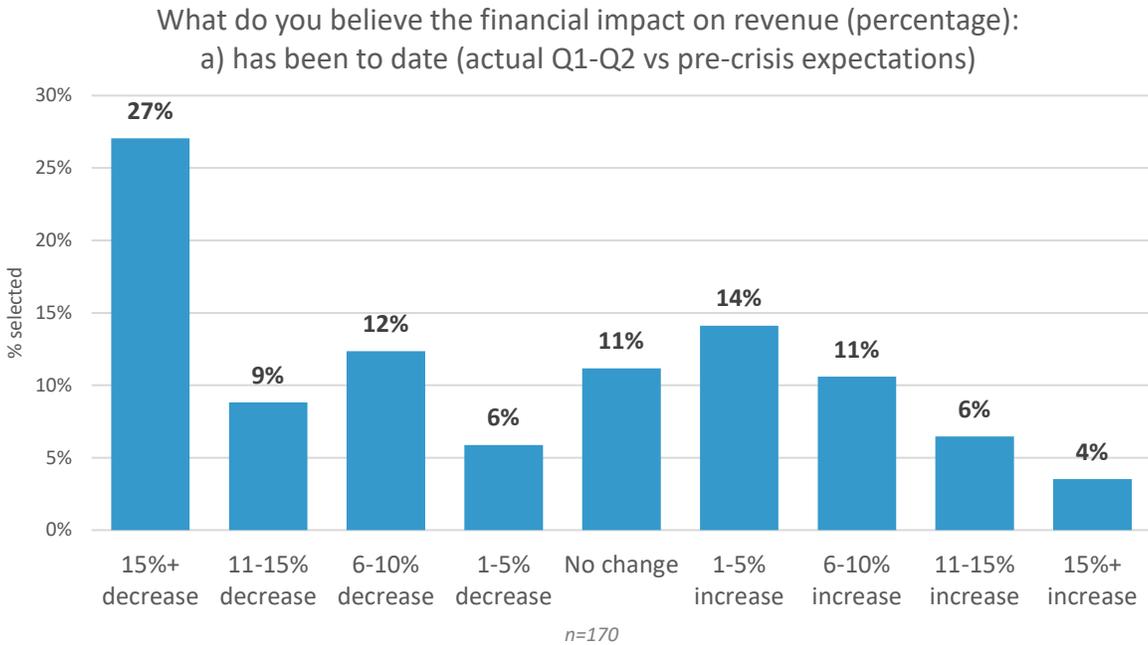


n=166, % do not add up to 100% given respondents can select up to three choices

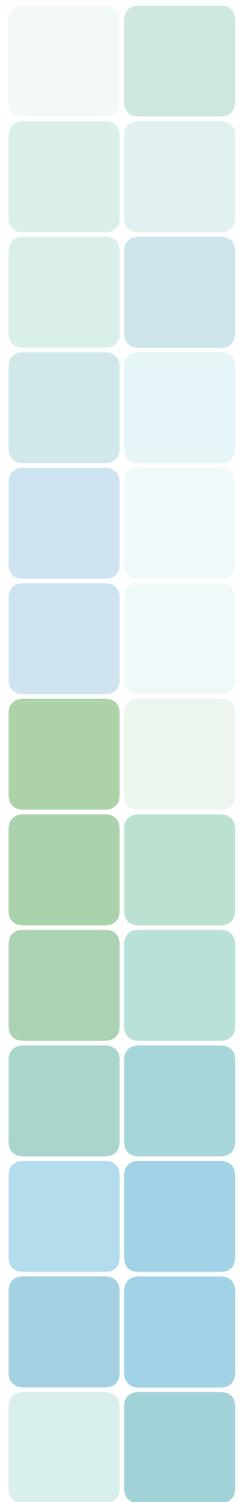
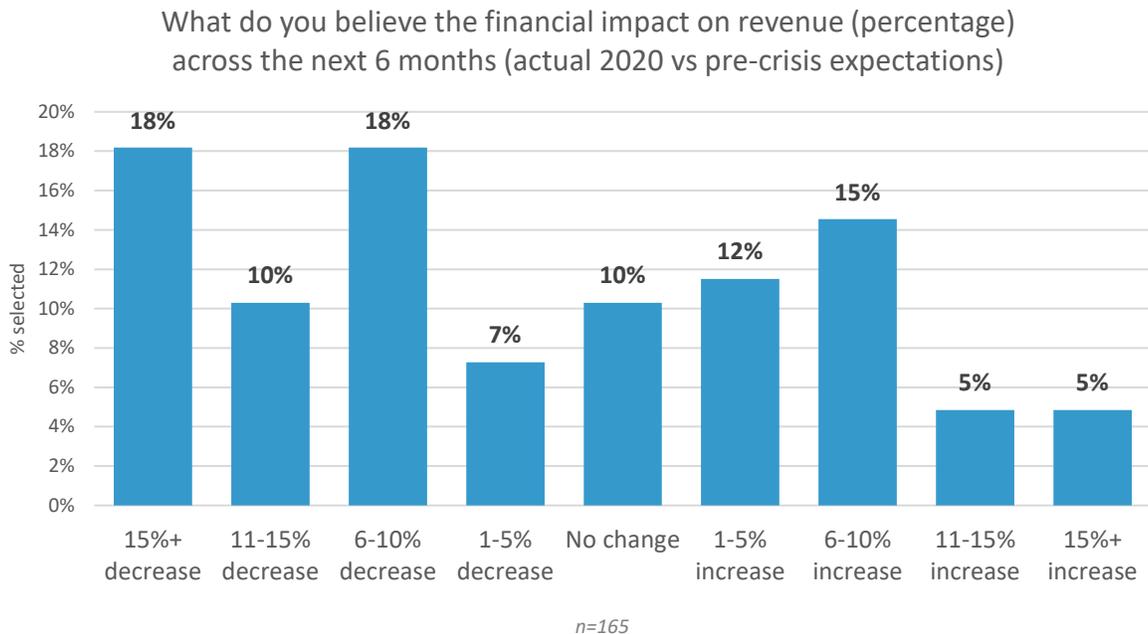
Financial Impact

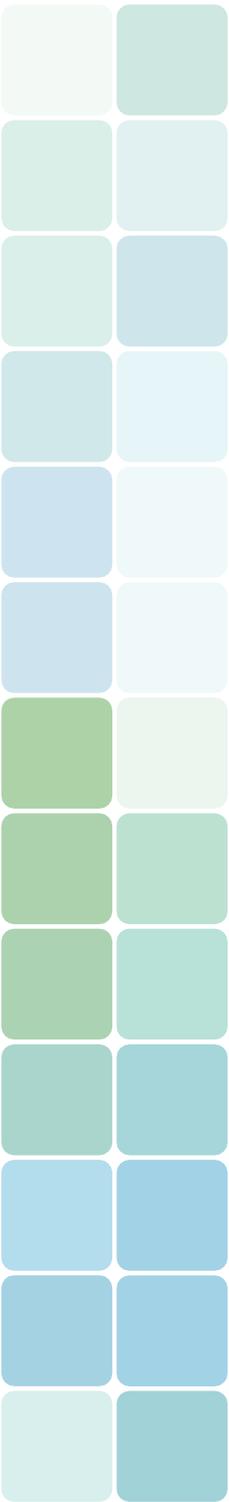
Revenue

Anticipated business operations and revenue projections have changed due to the pandemic. When asked about actual Q1/Q2 revenue versus Q1/Q2 pre-crisis revenue expectations, 54% of all respondents reported some type of a decrease, 11% saw no change, and 35% reported an increase in revenue.



Looking into the future, respondents believe the next six months may look very similar to the past few months, with 54% believing there will be some type of a decrease, 10% see no change, and 36% believe they will see an increase in revenue. For those who believe they will experience a decrease in revenue relative to pre-crisis expectations, respondents believe they will experience less significant decreases than what has previously occurred.

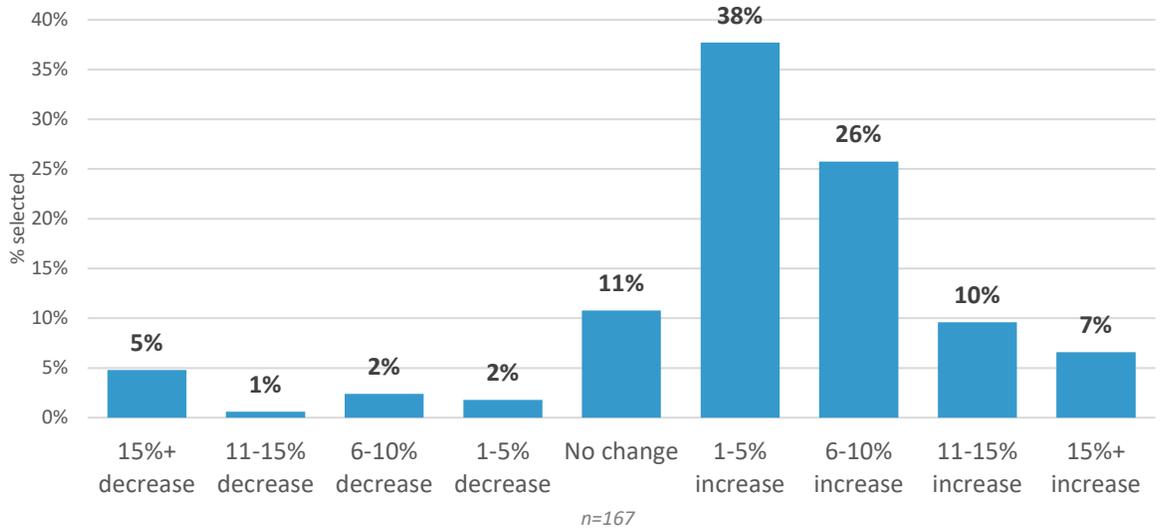


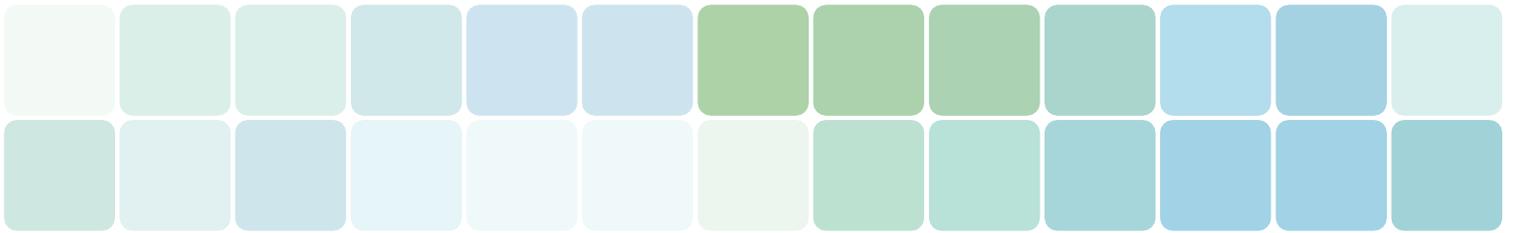


Costs

In addition to impacts on revenues, the costs of doing business have changed due to COVID-19. Approximately 80% of respondents indicated an increase in costs, with the most common uptick of costs between 1-5% increase.

What has been the impact on your monthly cost of doing business due to any changes in work flow and/or process – extra cleaning, sanitizing, staggering work shifts, food for employees, employee transportation, overtime/appreciation pay, etc.?



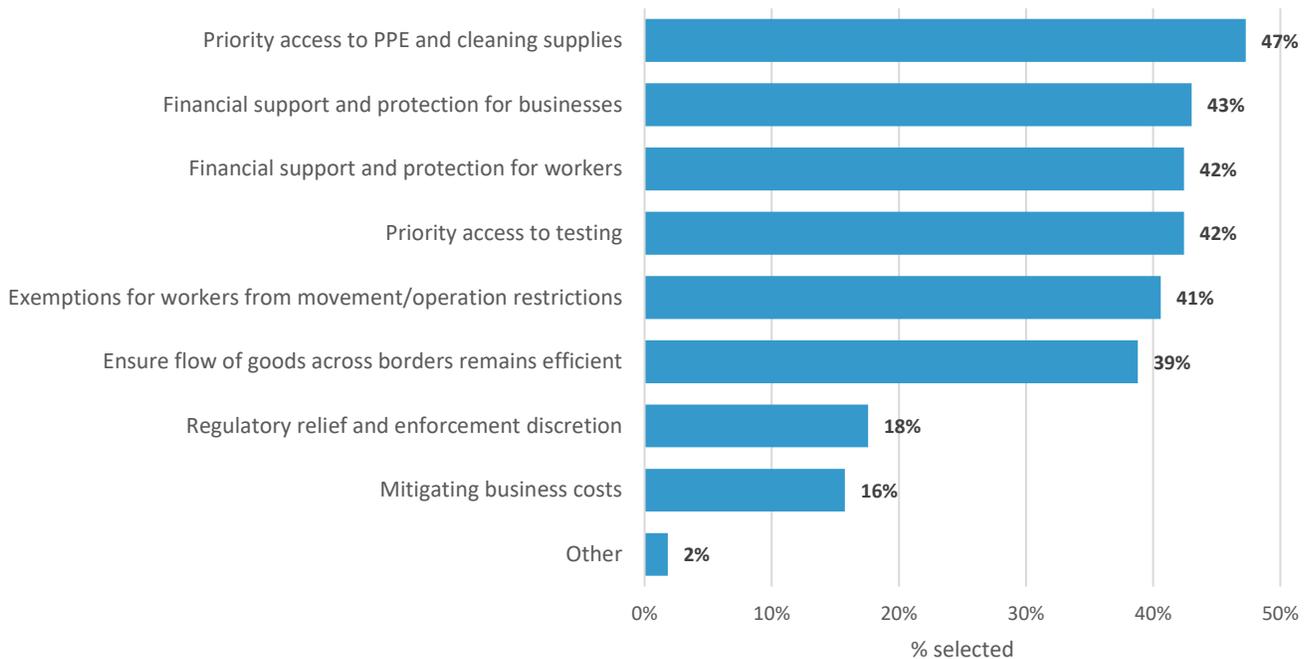


Government Response

Priorities

Governments and authorities have taken various actions to help mitigate the effects of the pandemic – some more specific or applicable to the cold chain. Respondents indicated access to PPE and cleaning as the top priorities on which they would like to see governments focus.

What mitigation measures do you believe should be the main priorities of governments, to best protect the cold chain? *Select the top 3 answers.*

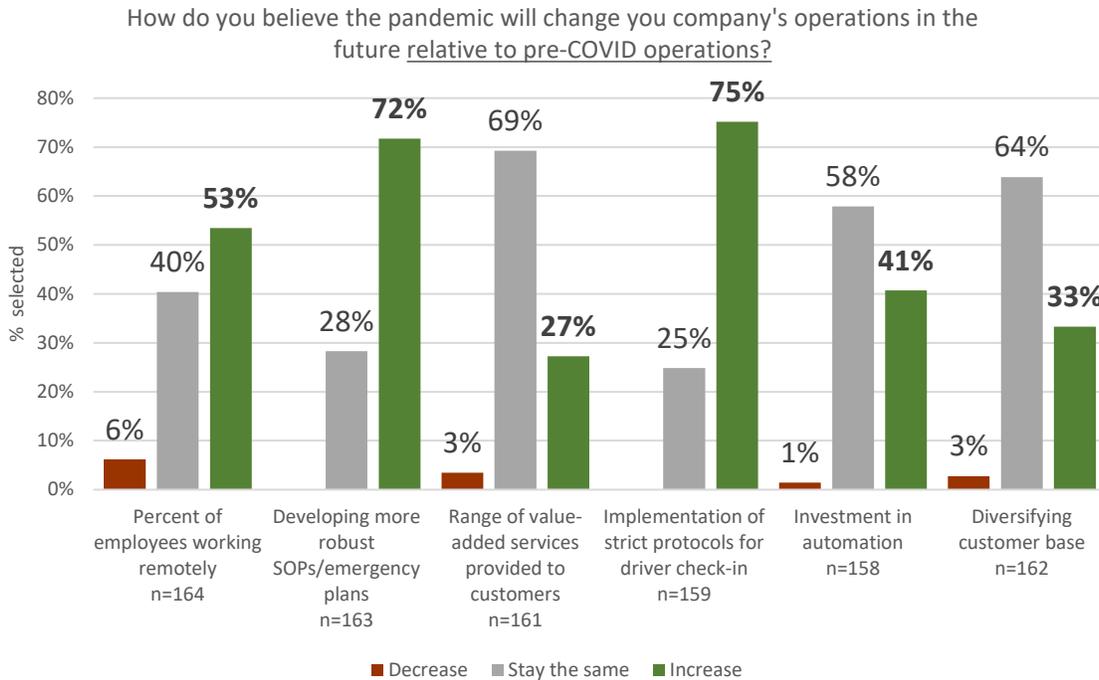


n=165, % do not add up to 100% given respondents can select up to three choices

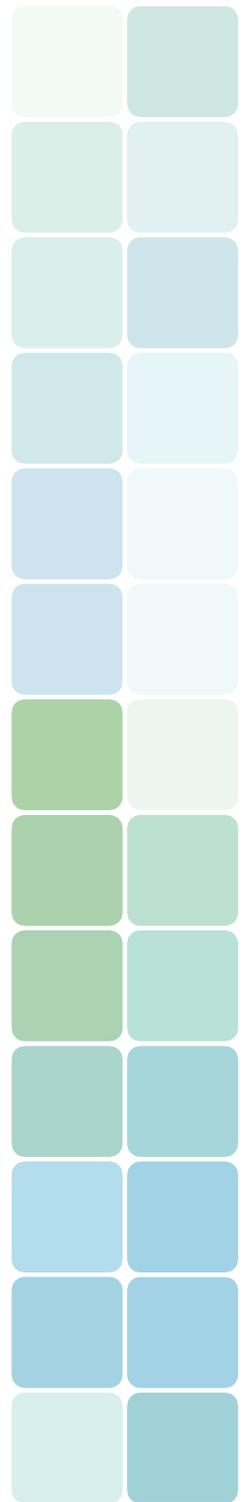
Future Outlook

Business Operations

Because the virus is thought to spread mainly through person-to-person contact, operations across the cold chain have been changed to reduce contact. While these measures were done out of necessity, the changes also provided an opportunity to adjust or try new processes or controls that, if effective and efficient, may remain in place after the pandemic ends. Nearly three quarters of all respondents indicated that, in the future, they will develop more robust SOPs/emergency plans as well as implement strict protocols for driver check-in (e.g. paperless, calling to check in).

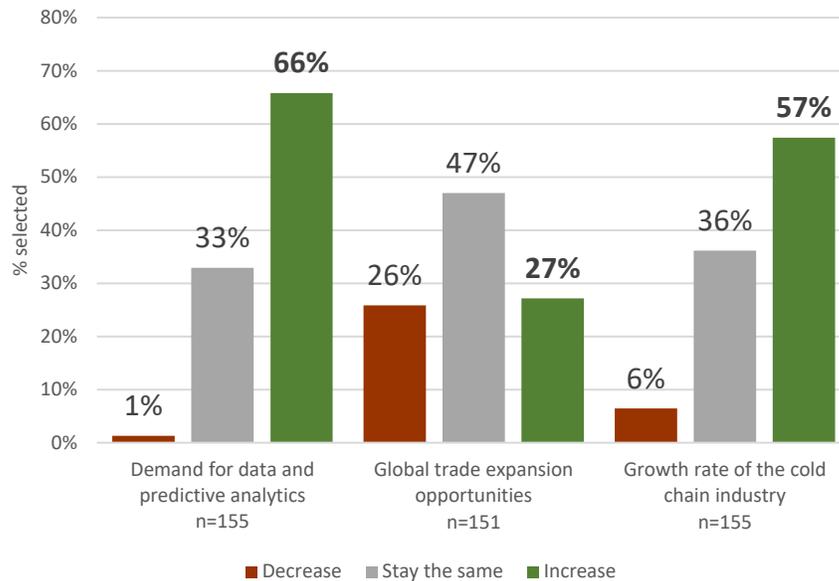
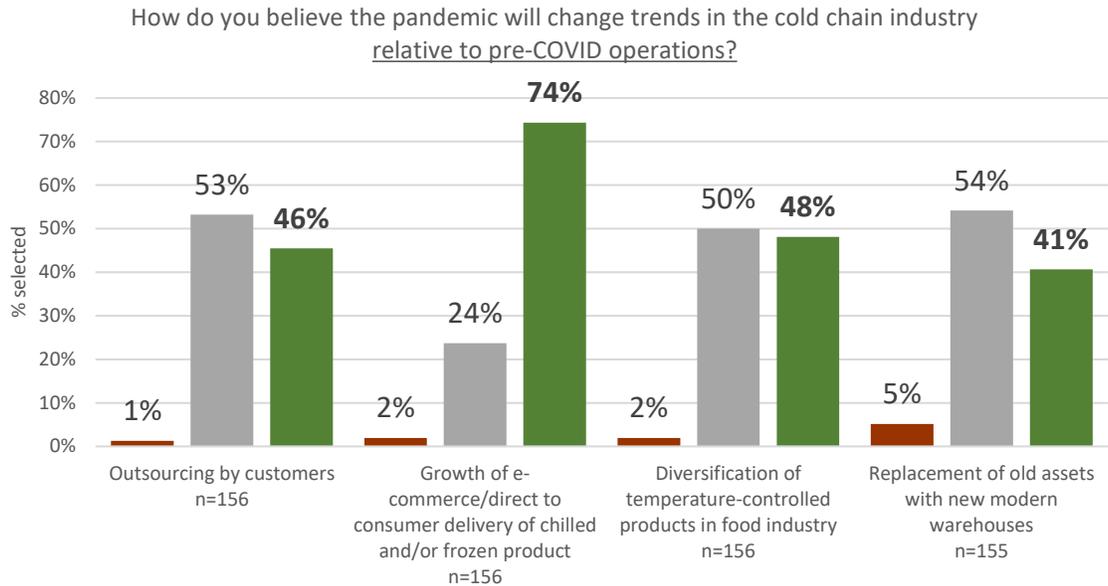


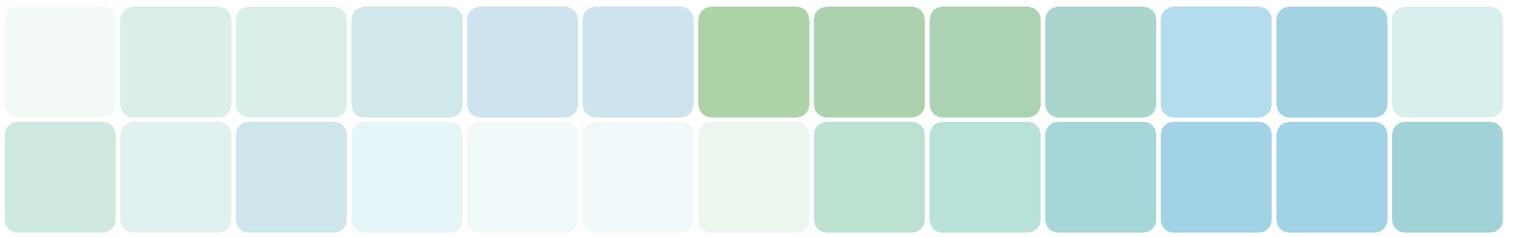
For those who responded to the question about percentage of employees working remotely, approximately 4.5% of their workforce worked remotely prior to the pandemic. That has increased to 19.8% of the workforce during the pandemic, and there is an expectation that about 10.6% of the workforce will continue to work remotely. This could lead to an increase of 6.1% of the workforce working remotely moving forward.



Industry Trends

Given the crisis has reshaped and adjusted operations, outlook on future trends have shifted. About three quarters of all respondents think that the pandemic will cause an increase in the growth of e-commerce/direct to consumer delivery of chilled and/or frozen product relative to the growth path pre-COVID. Even stronger demand for data and predictive analytics is expected in the future, and respondents are optimistic that the growth rate will be even more significant because of the pandemic. On the flip side, 73% of respondents believe that global trade opportunities will either decrease or remain the same relative to pre-COVID expectations.

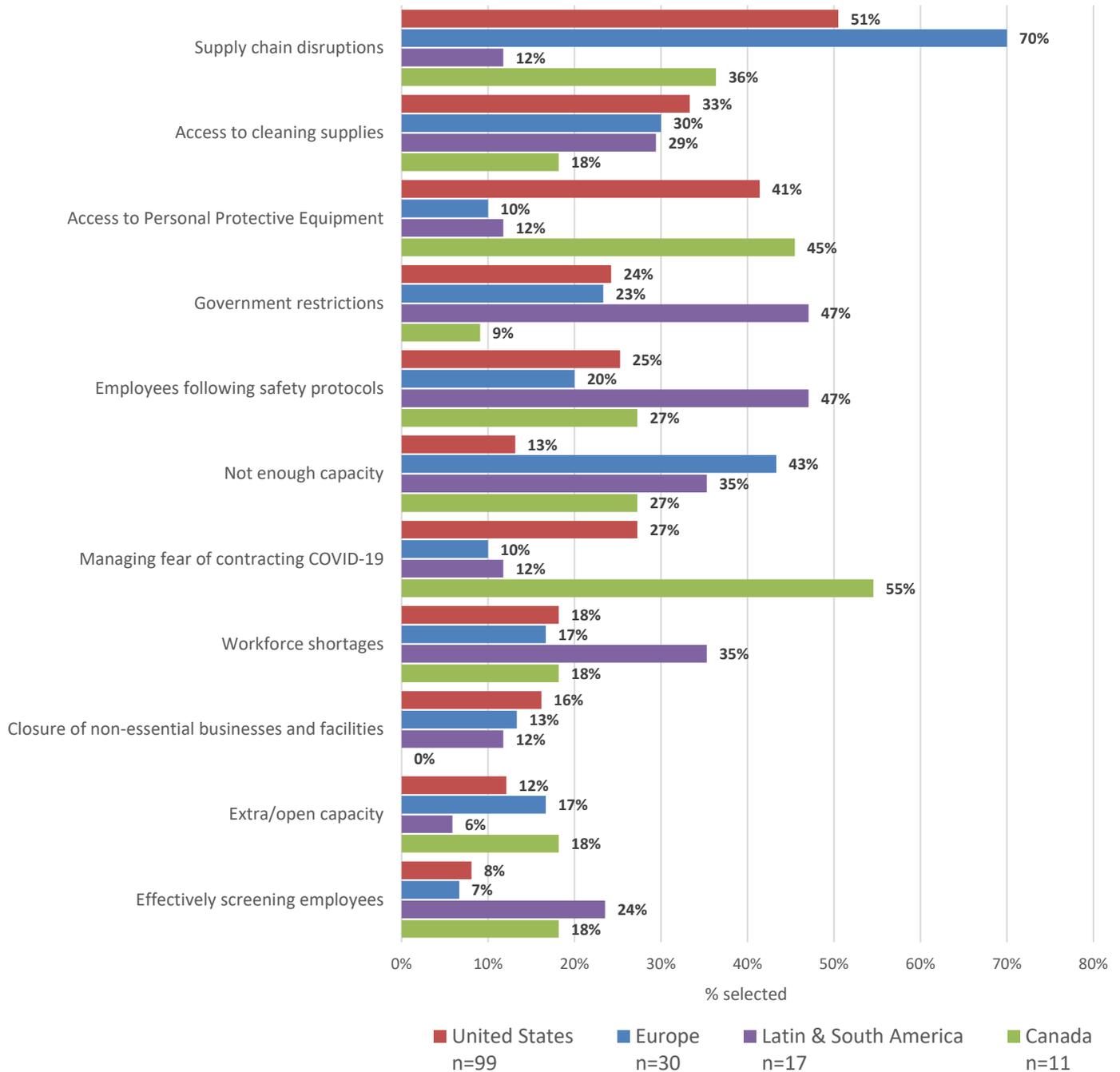




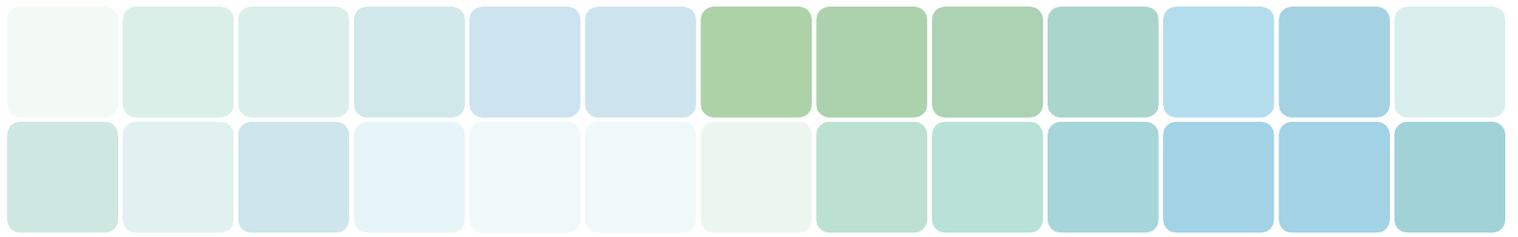
Regional Results

Business Challenges

What are the top three challenges facing your business as a result of the current COVID-19 pandemic?

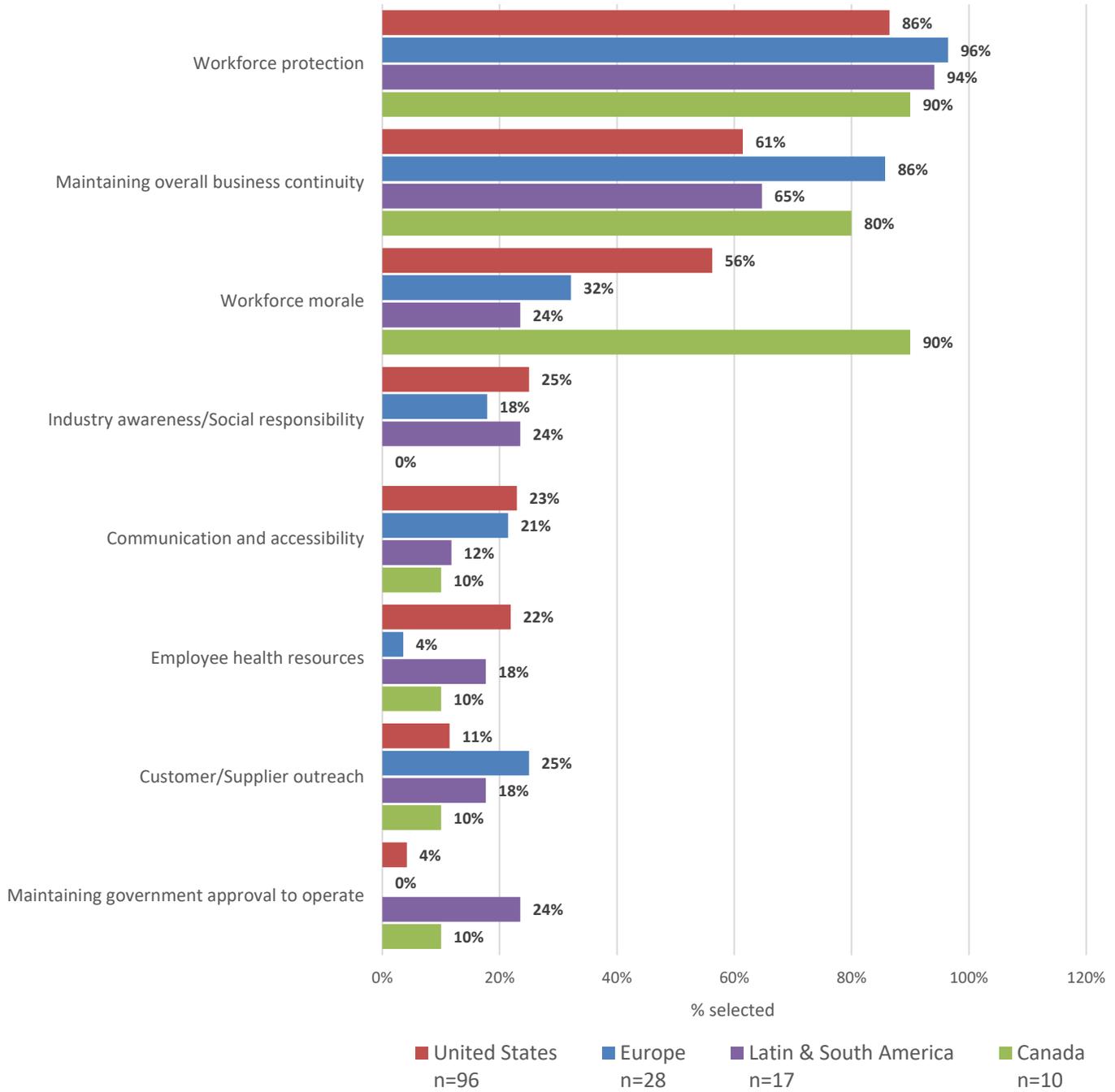


% do not add up to 100% given respondents can select up to three choices

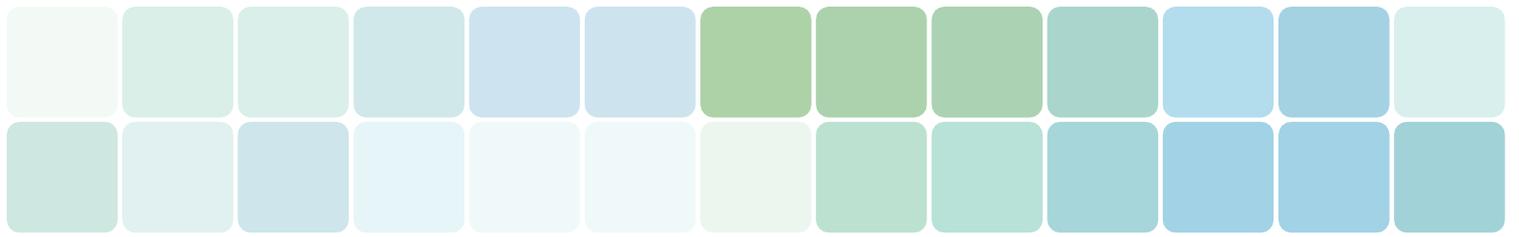


Business Response

Which of the following measures are you prioritizing as a company in reaction to the crisis? *Select the top 3 answers.*



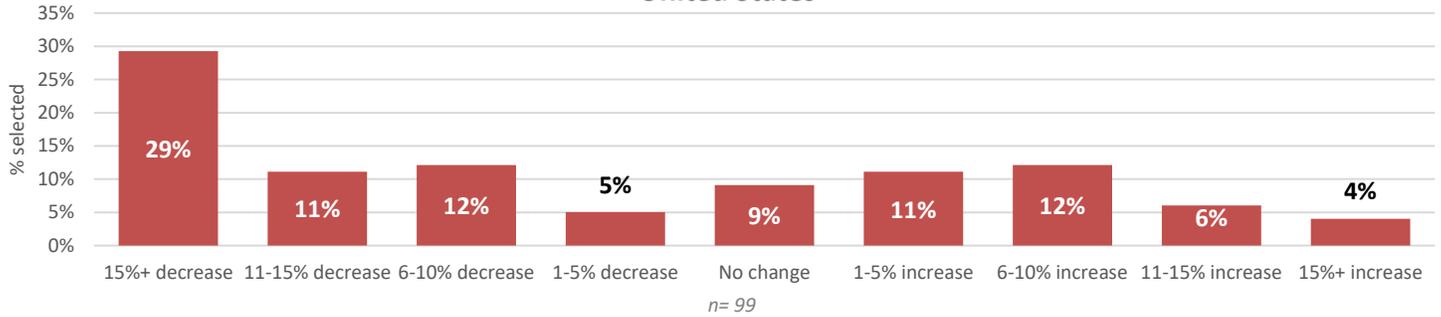
% do not add up to 100% given respondents can select up to three choices



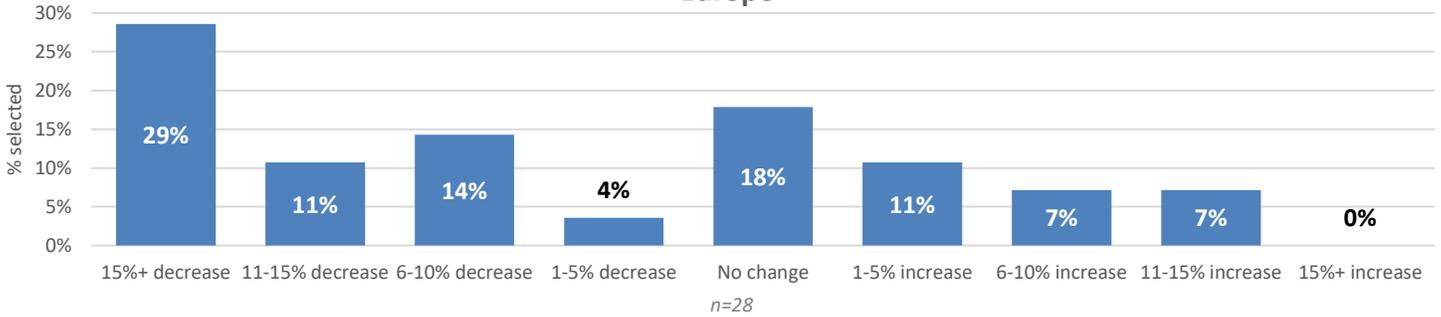
Financial Impact – Revenue

What do you believe the financial impact on revenue (percentage): a) has been to date (actual Q1-Q2 vs pre-crisis expectations)

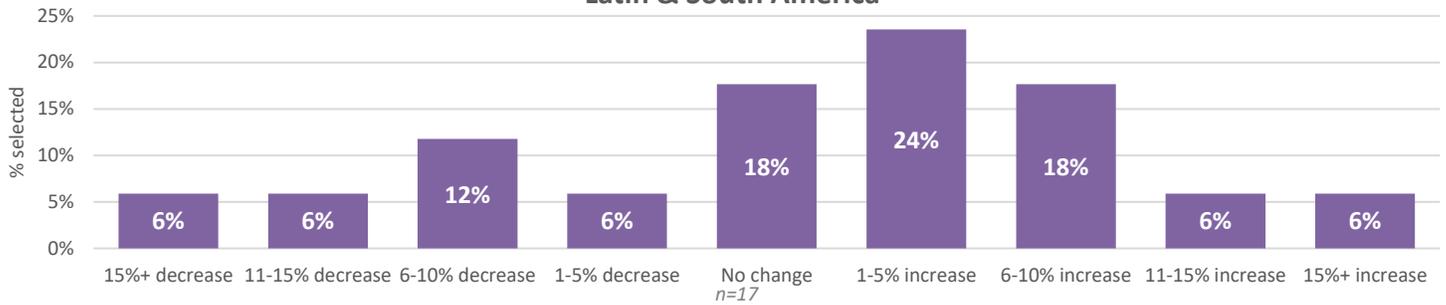
United States



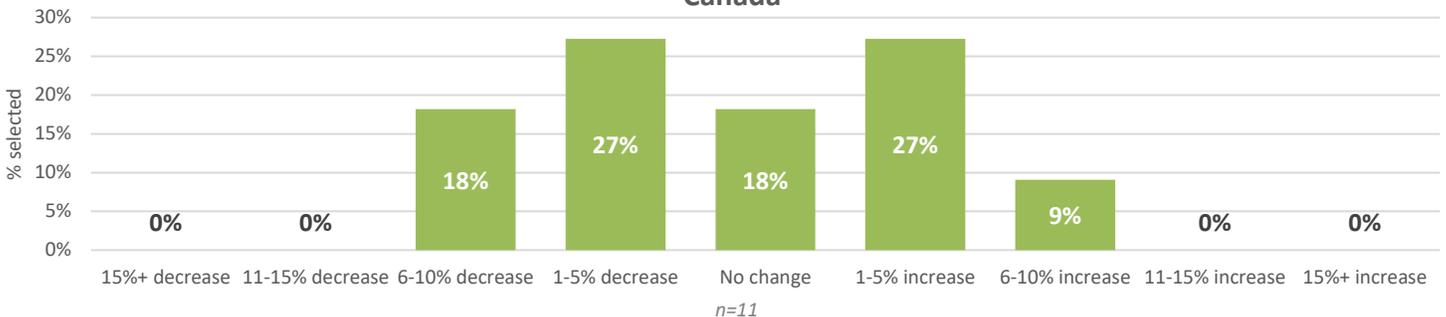
Europe

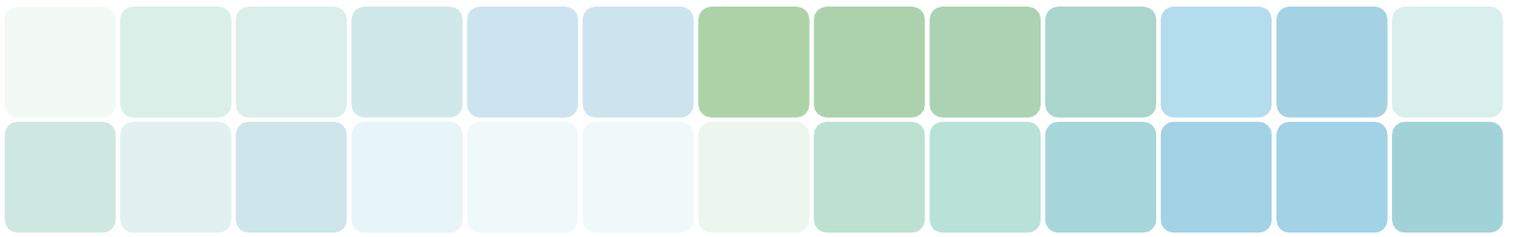


Latin & South America



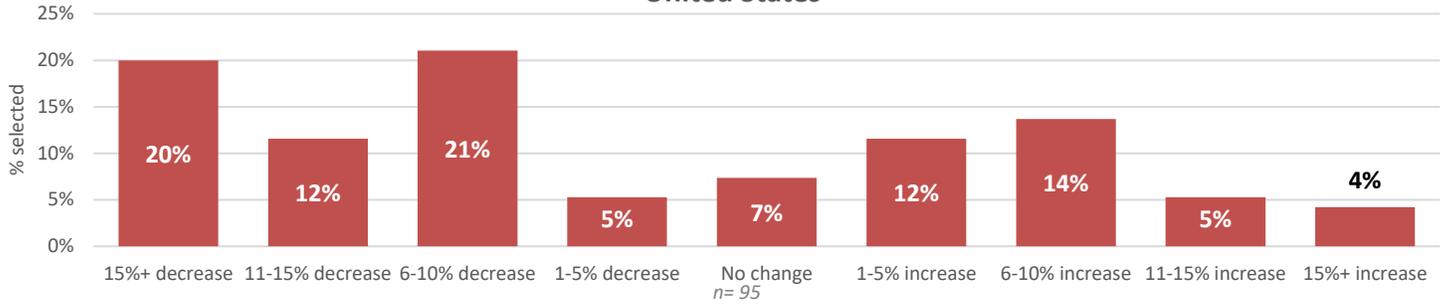
Canada



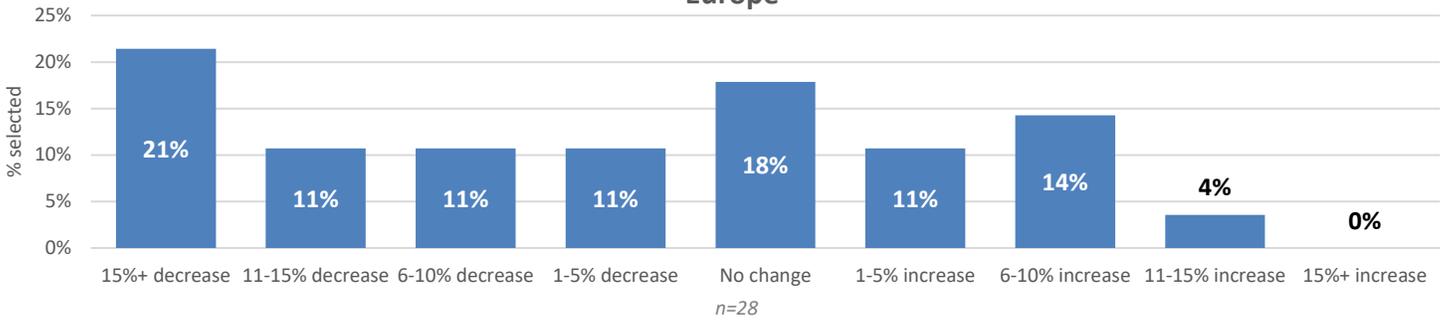


What do you believe the financial impact on revenue: could be across the next 6 months
 (actual Q1-Q2 vs pre-crisis expectations)

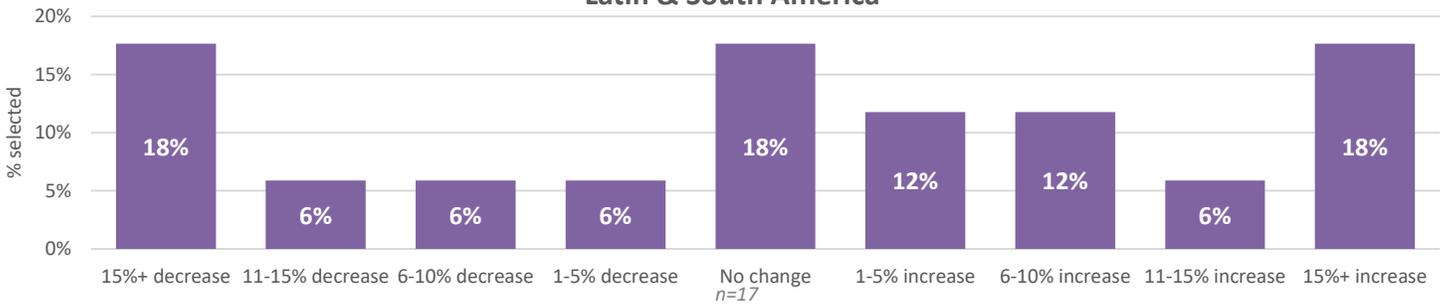
United States



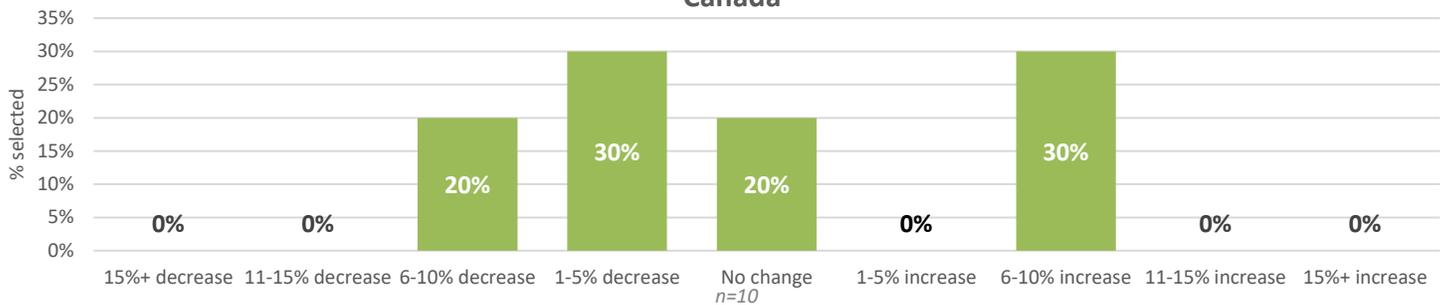
Europe

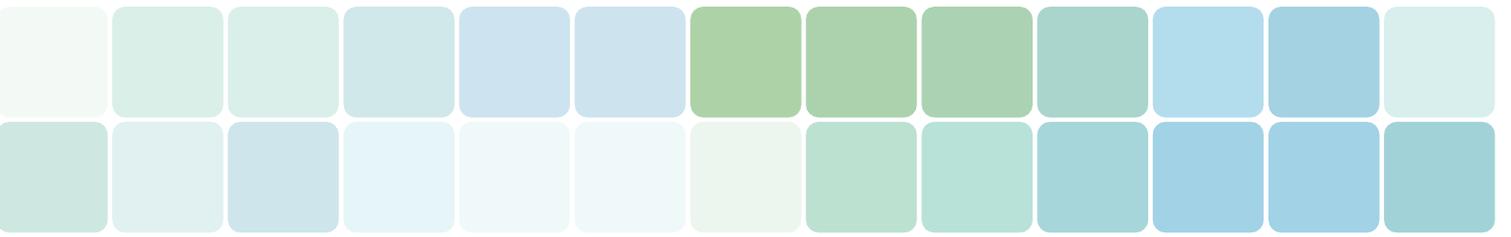


Latin & South America



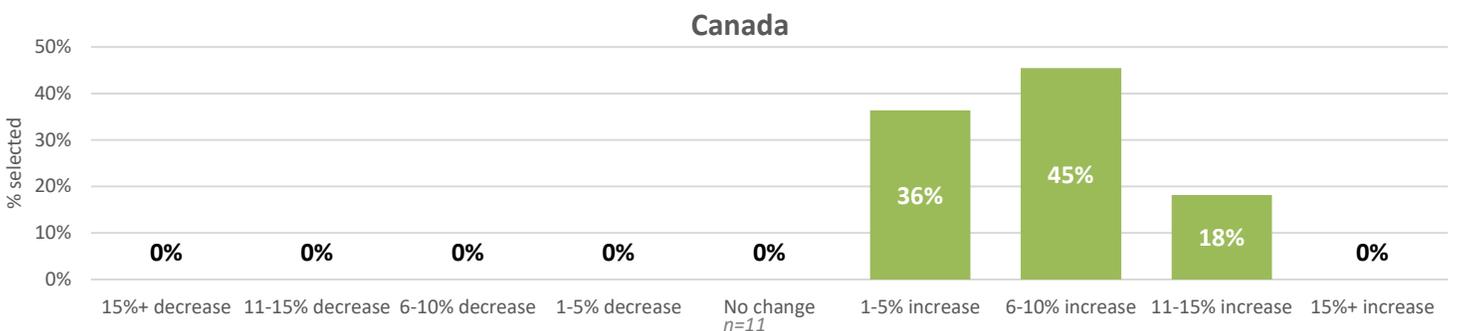
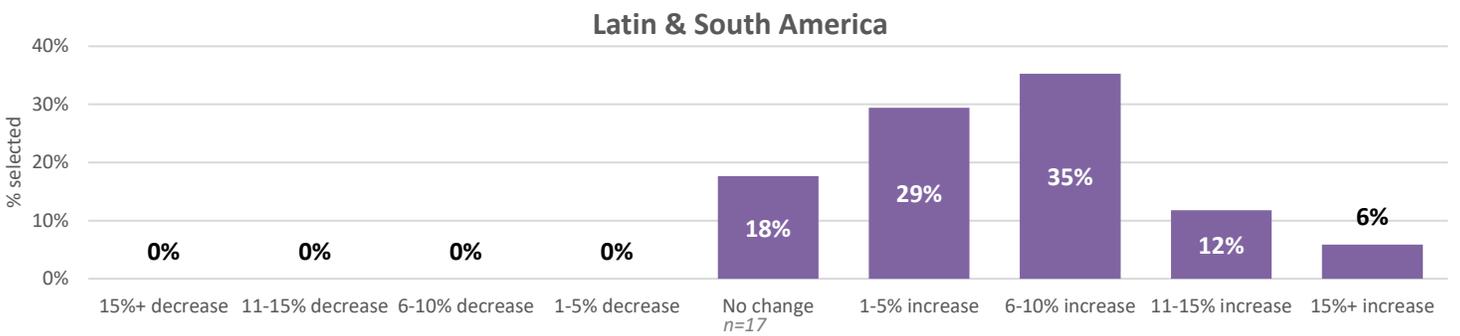
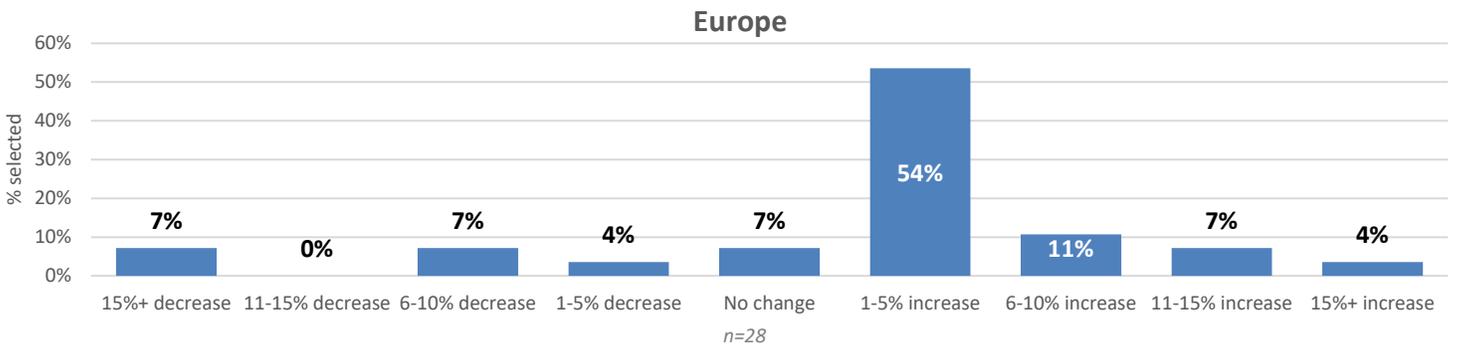
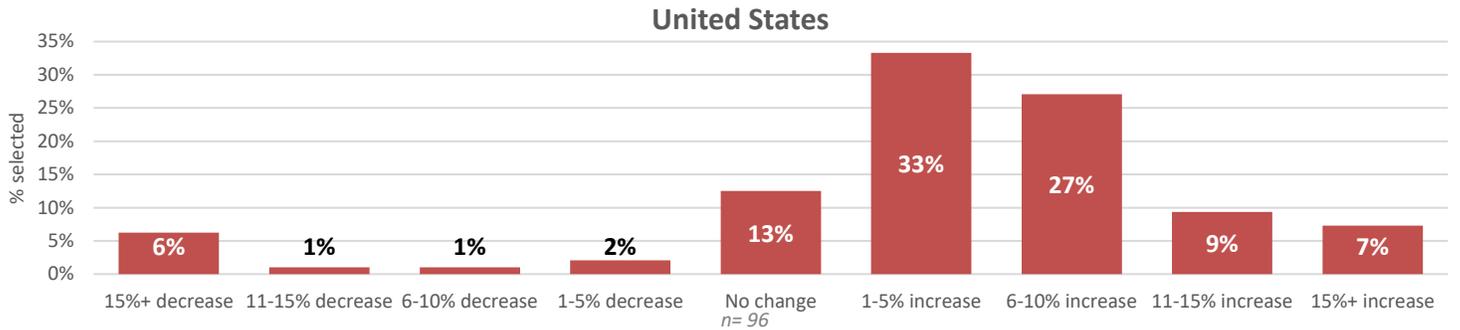
Canada

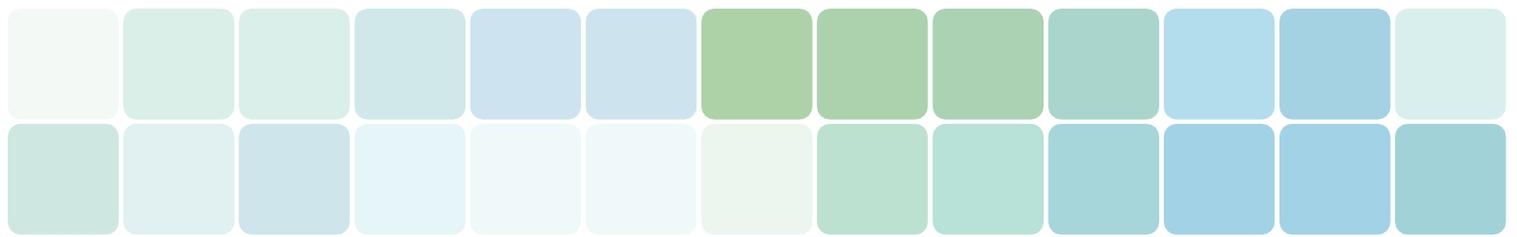




Financial Impact – Costs

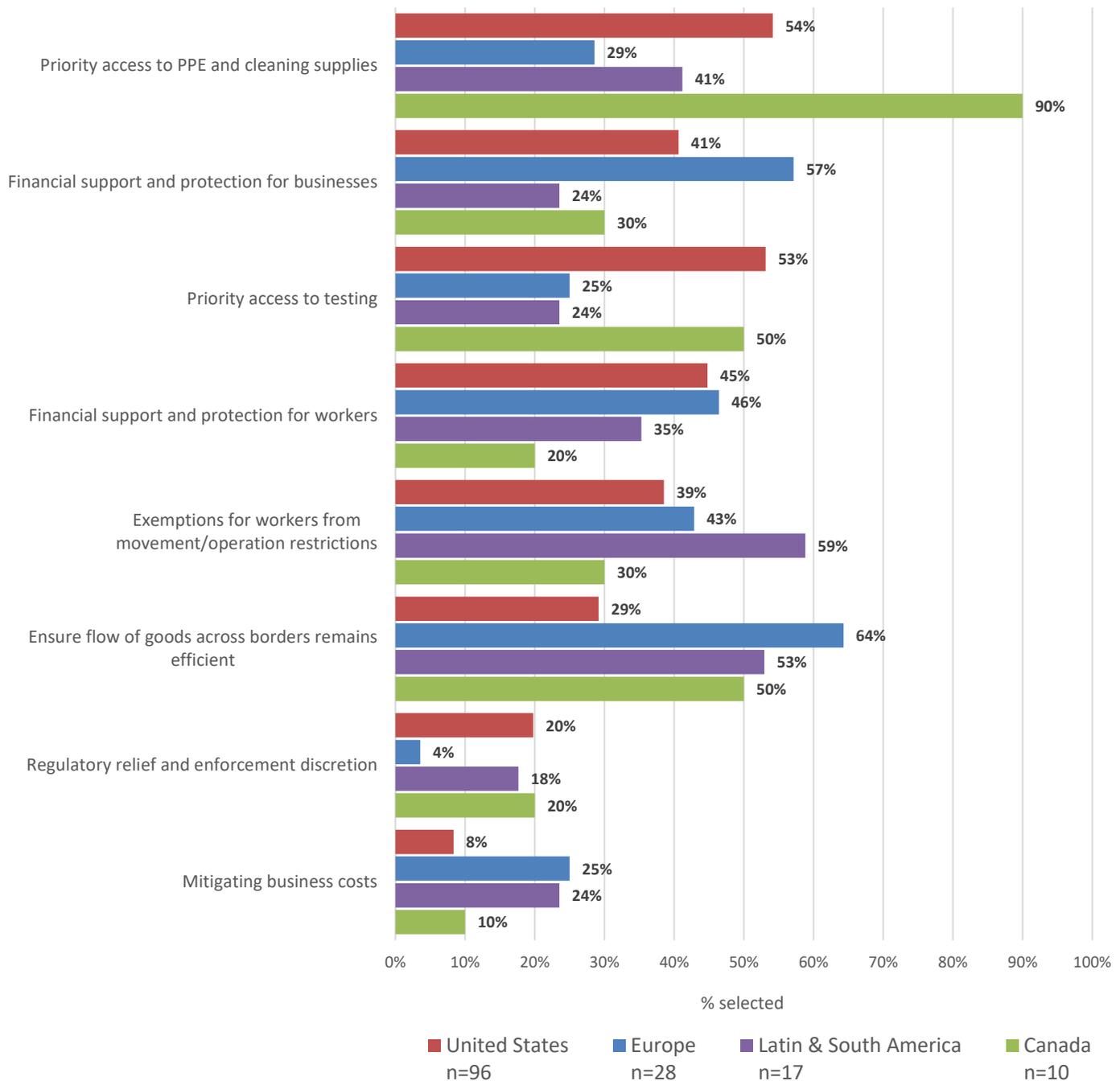
What has been the impact on your monthly cost of doing business due to any changes in work flow and/or process – extra cleaning, sanitizing, staggering work shifts, food for employees, employee transportation, overtime/appreciation pay, etc.?



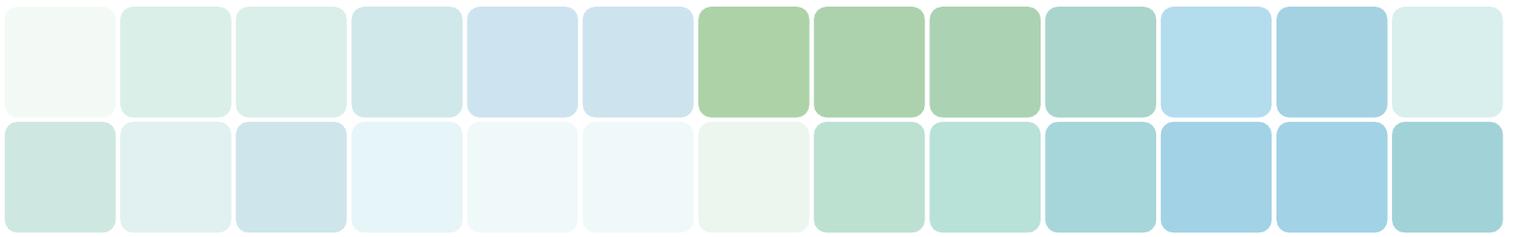


Government Priorities

What mitigation measures do you believe should be the main priorities of governments, to best protect the cold chain? *Select the top 3 answers.*



% do not add up to 100% given respondents can select up to three choices

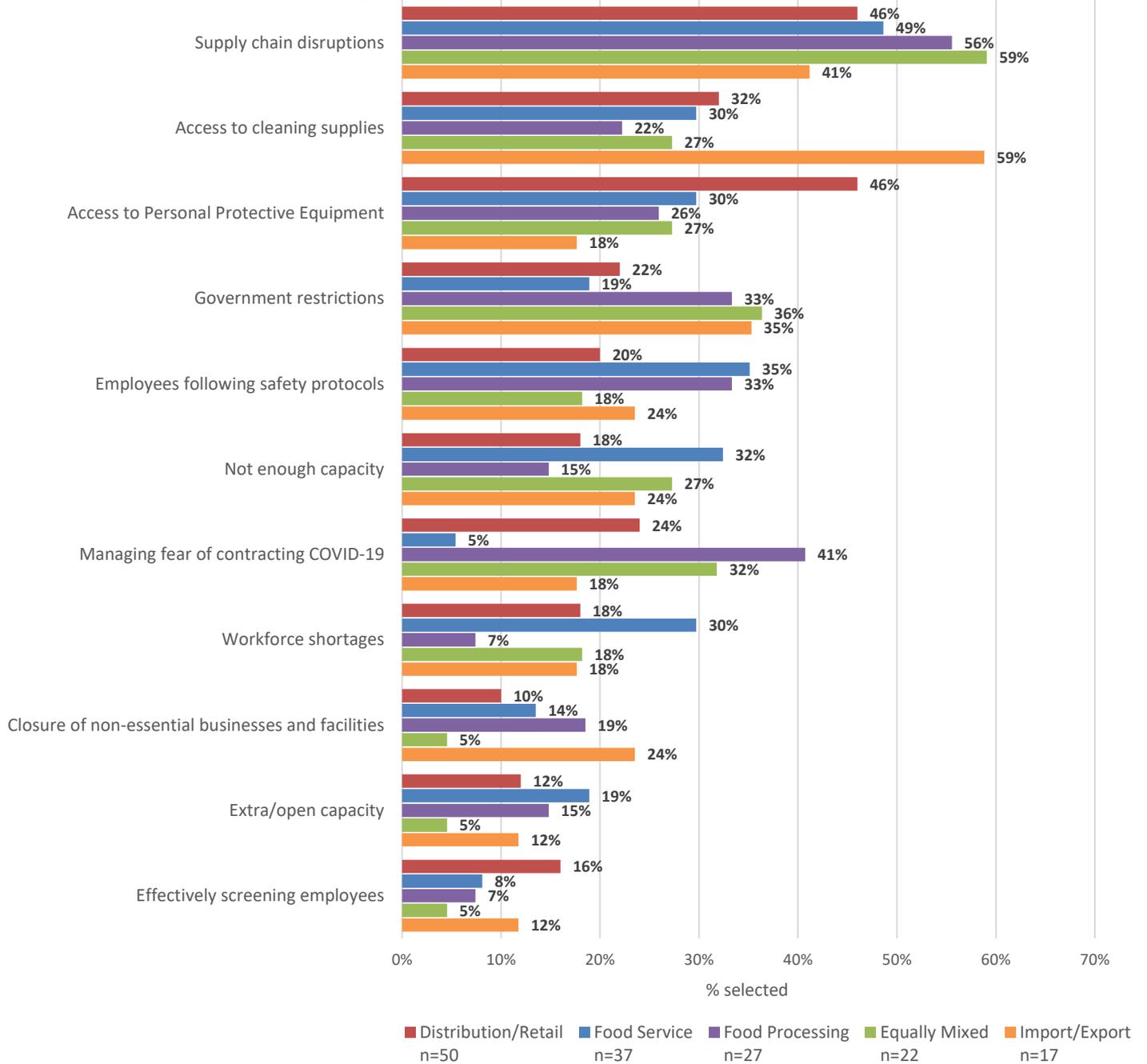


Company Type Results

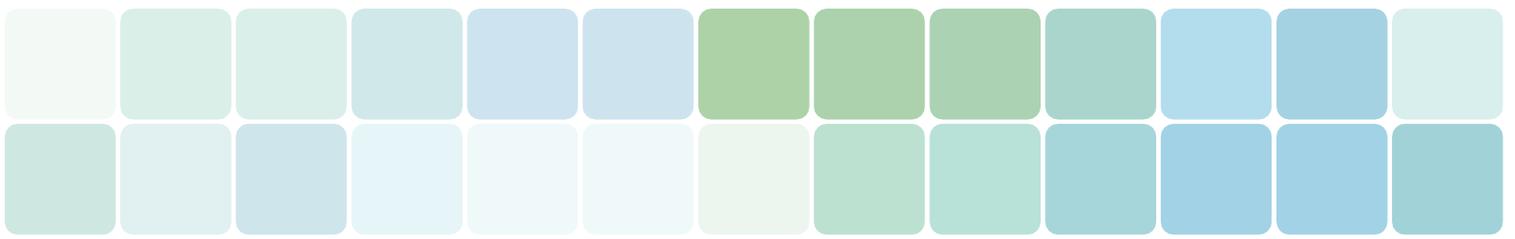
The following results are classified by business type according to which is the largest segment that a business supports. If a company was equally split, they will appear in each business type, so the overall number of observations are larger than total responses.

Business Challenges

What are the top three challenges facing your business as a result of the current COVID-19 pandemic?

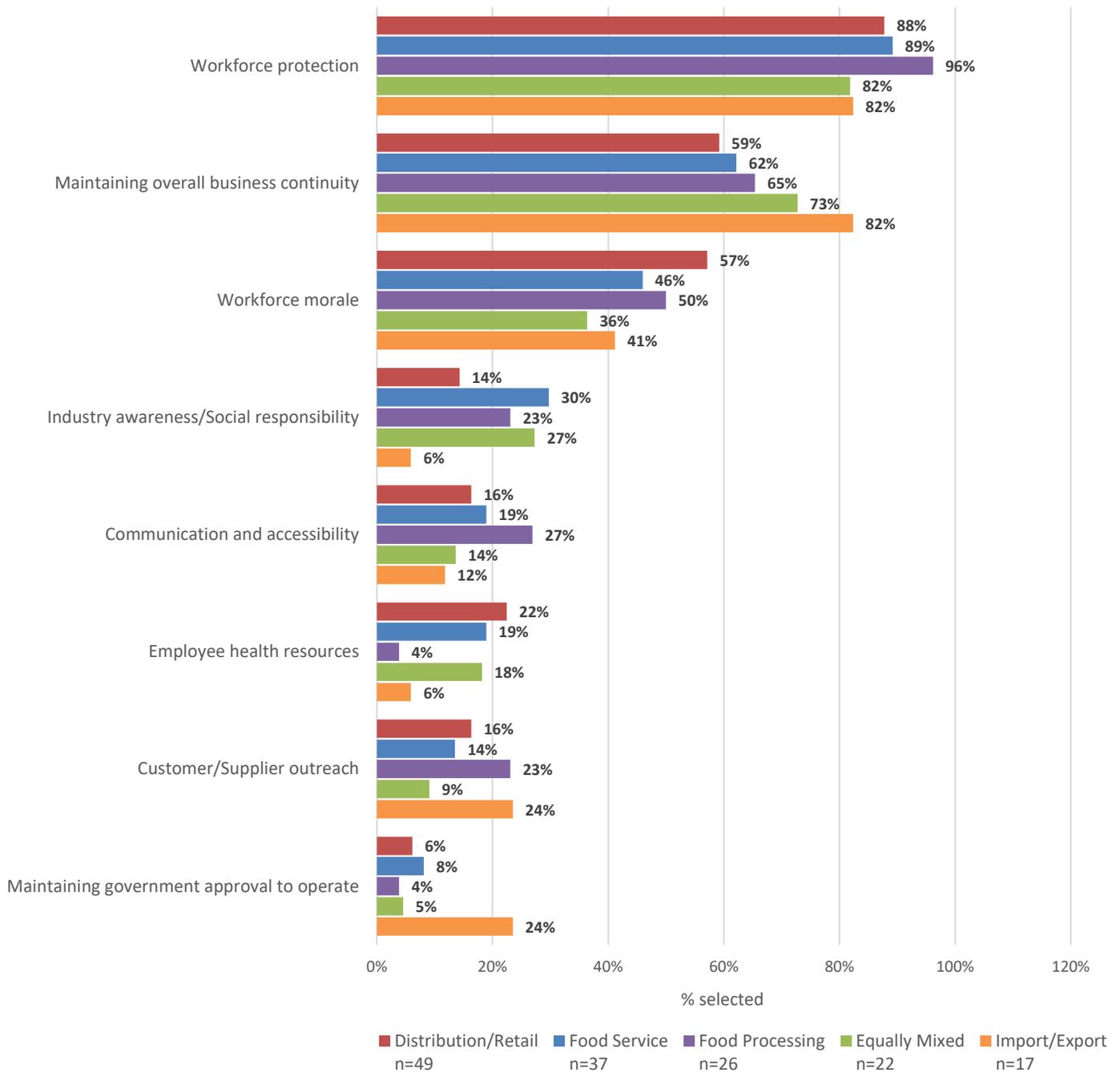


% do not add up to 100% given respondents can select up to three choices

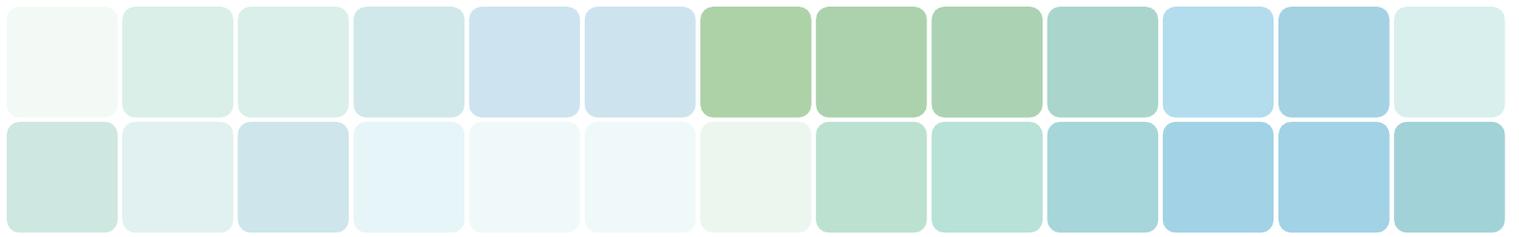


Business Response

Which of the following measures are you prioritizing as a company in reaction to the crisis? *Select the top 3 answers.*



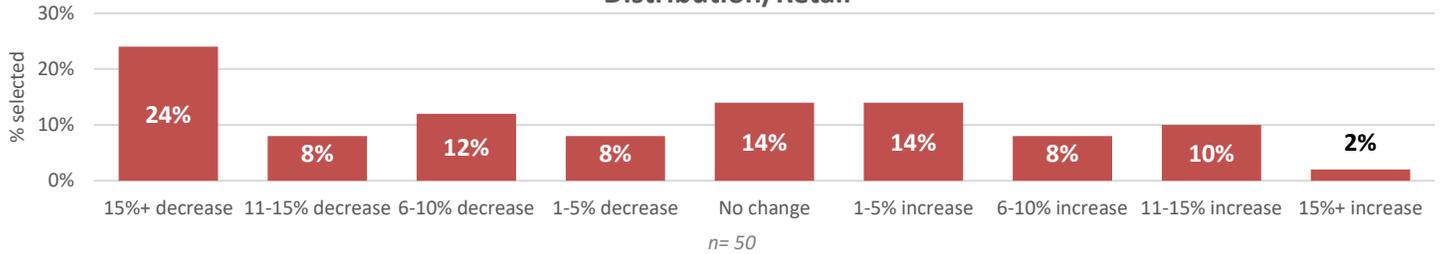
% do not add up to 100% given respondents can select up to three choices



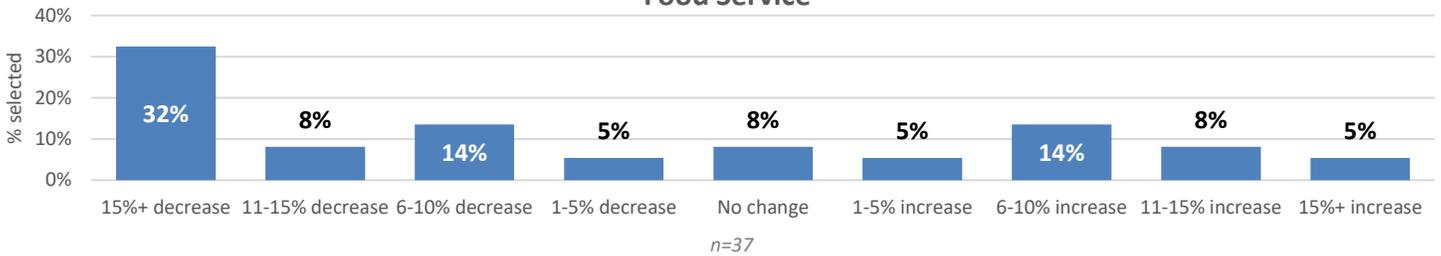
Financial Impact – Revenue

What do you believe the financial impact on revenue (percentage): a) has been to date (actual Q1-Q2 vs pre-crisis expectations)

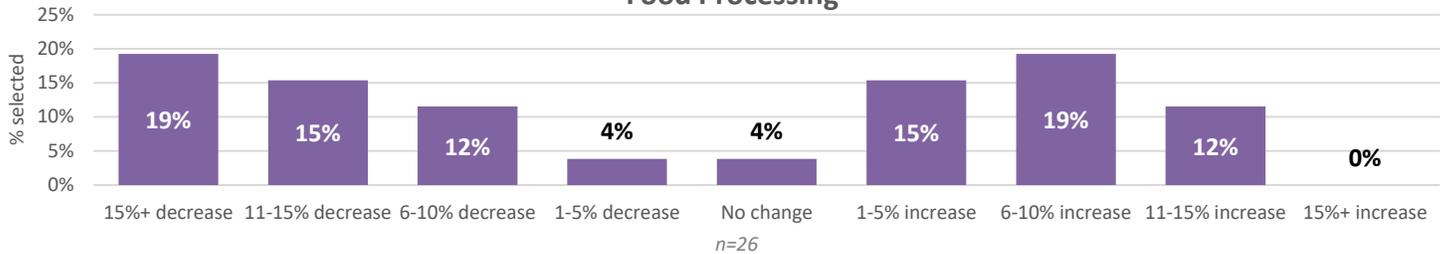
Distribution/Retail



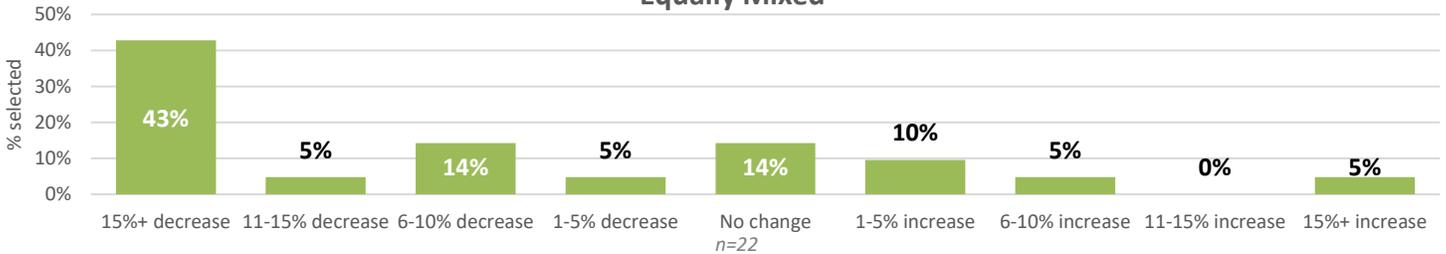
Food Service



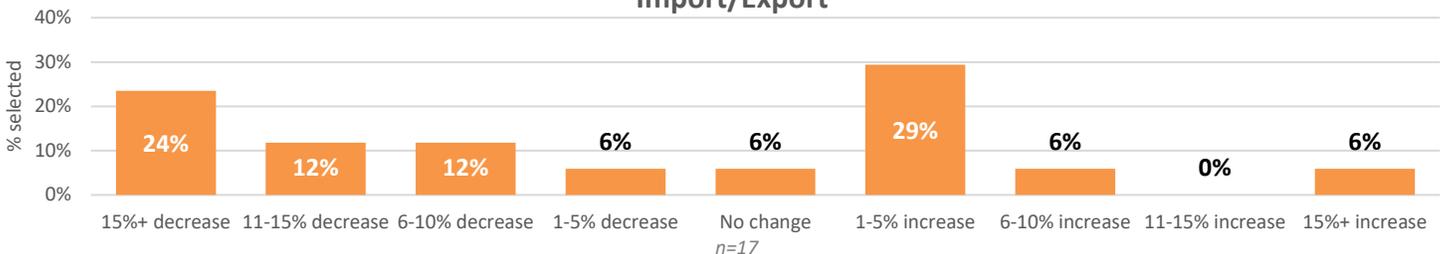
Food Processing

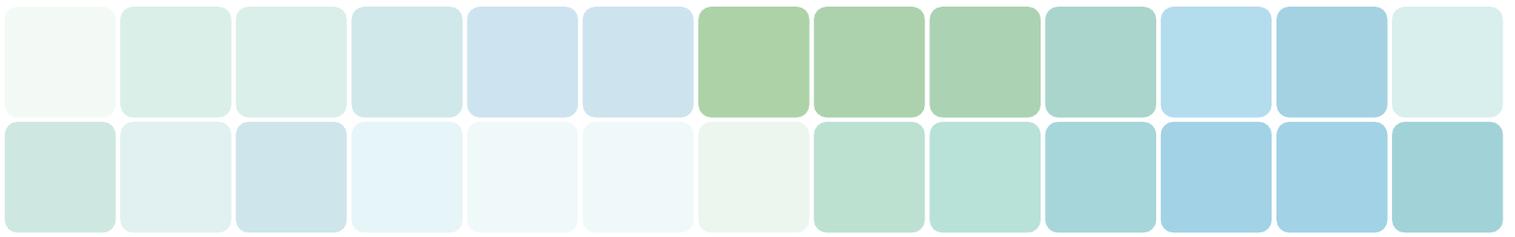


Equally Mixed



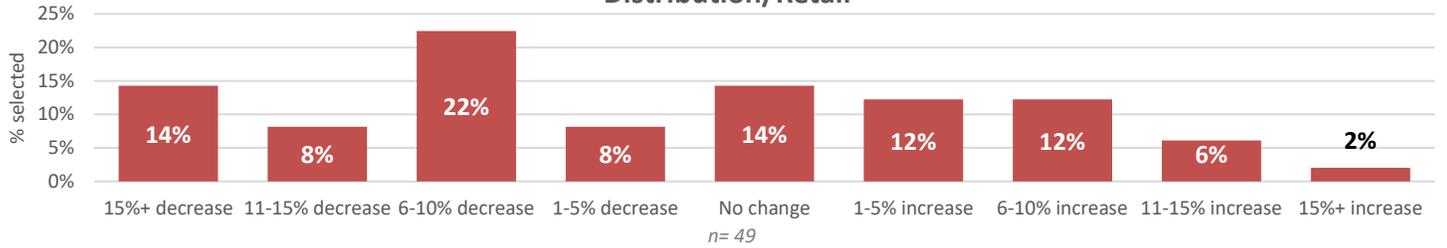
Import/Export



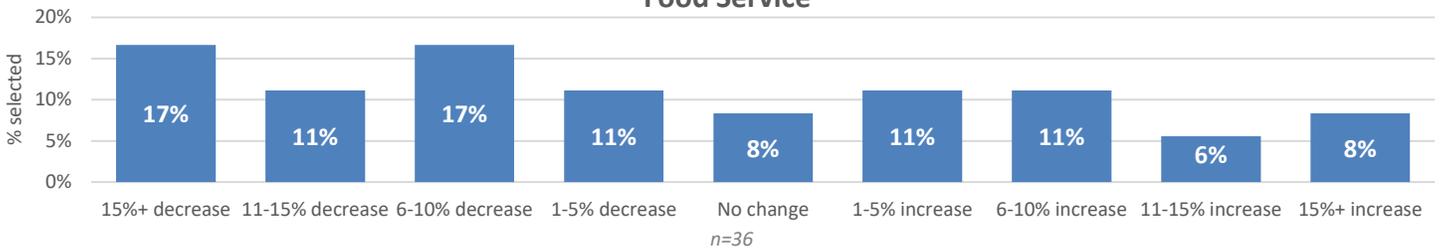


What do you believe the financial impact on revenue: could be across the next 6 months
 (actual Q1-Q2 vs pre-crisis expectations)

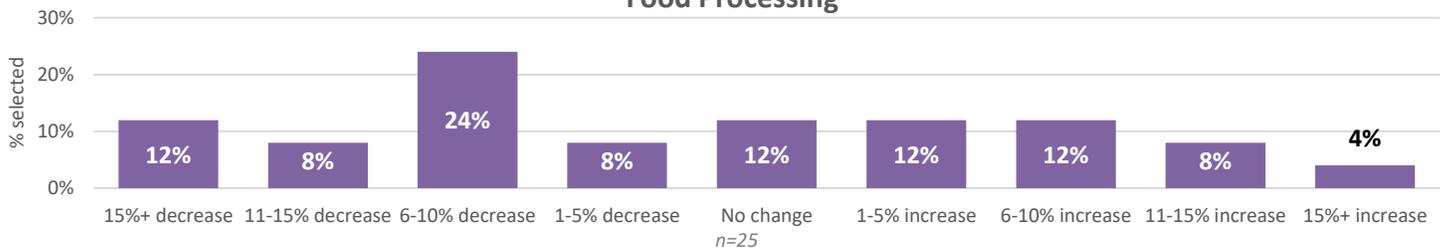
Distribution/Retail



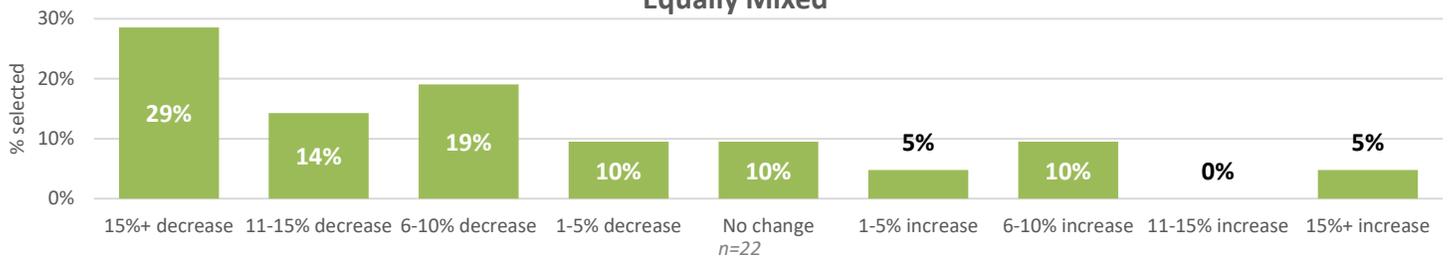
Food Service



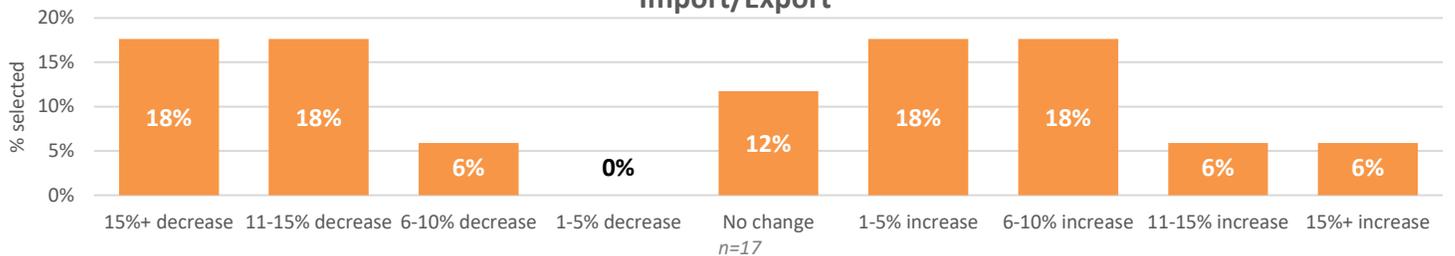
Food Processing

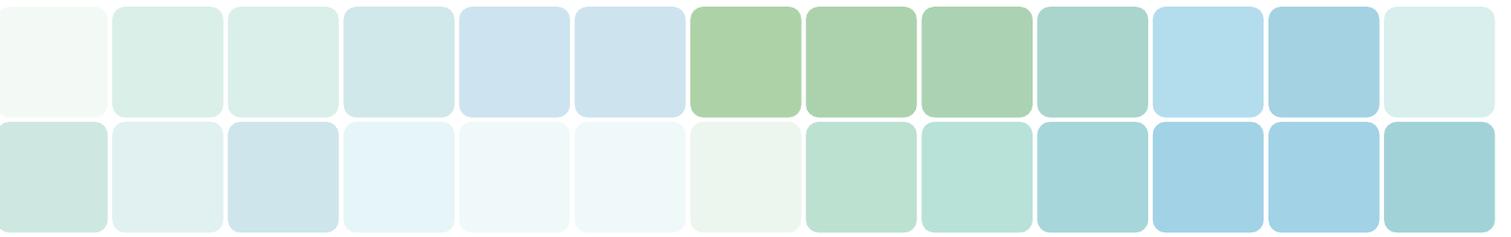


Equally Mixed



Import/Export

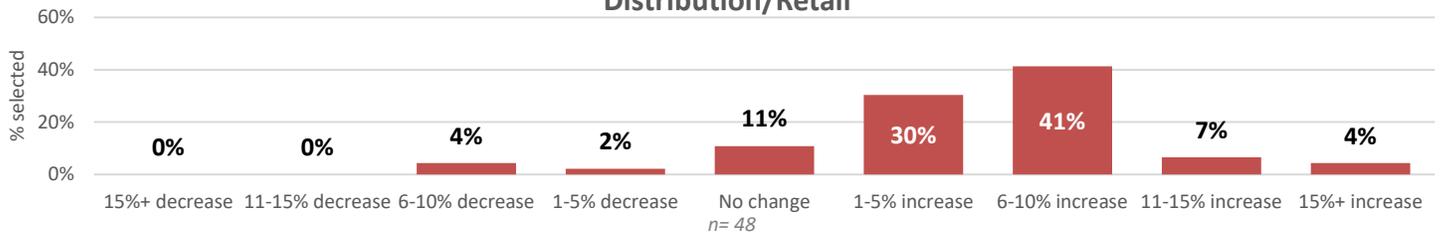




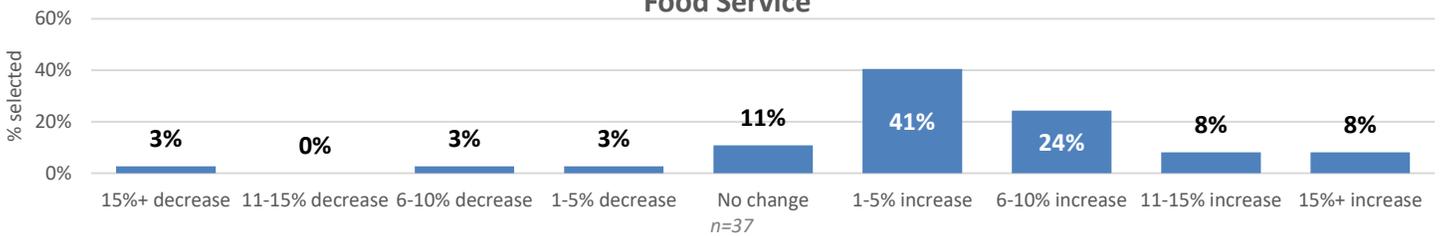
Financial Impact – Costs

What has been the impact on your monthly cost of doing business due to any changes in work flow and/or process – extra cleaning, sanitizing, staggering work shifts, food for employees, employee transportation, overtime/appreciation pay, etc.?

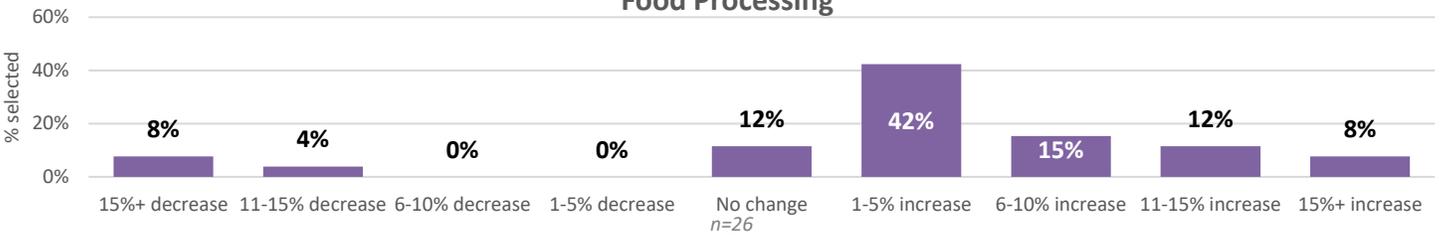
Distribution/Retail



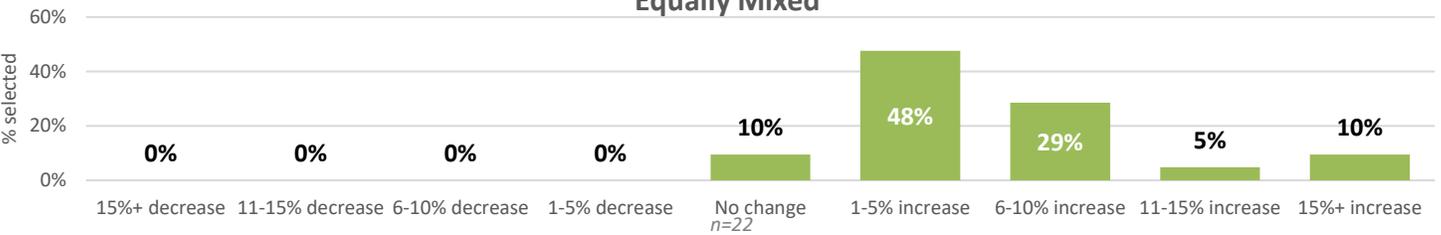
Food Service



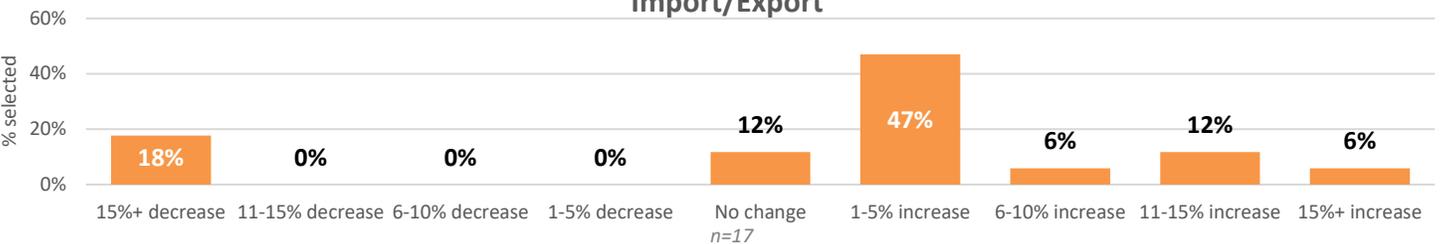
Food Processing

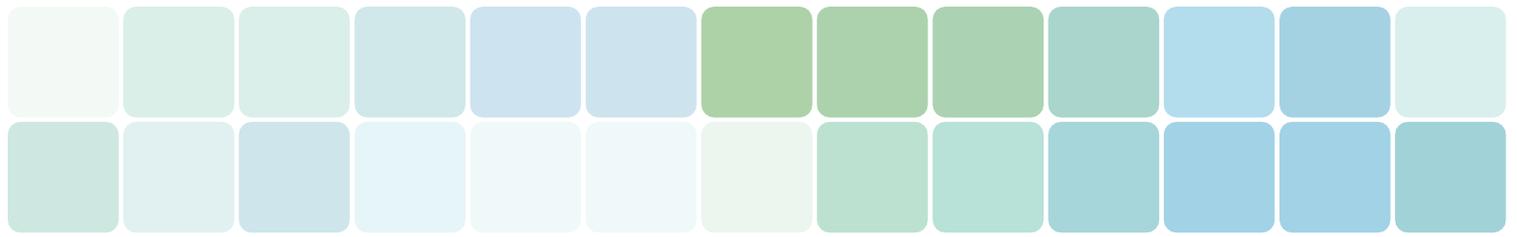


Equally Mixed



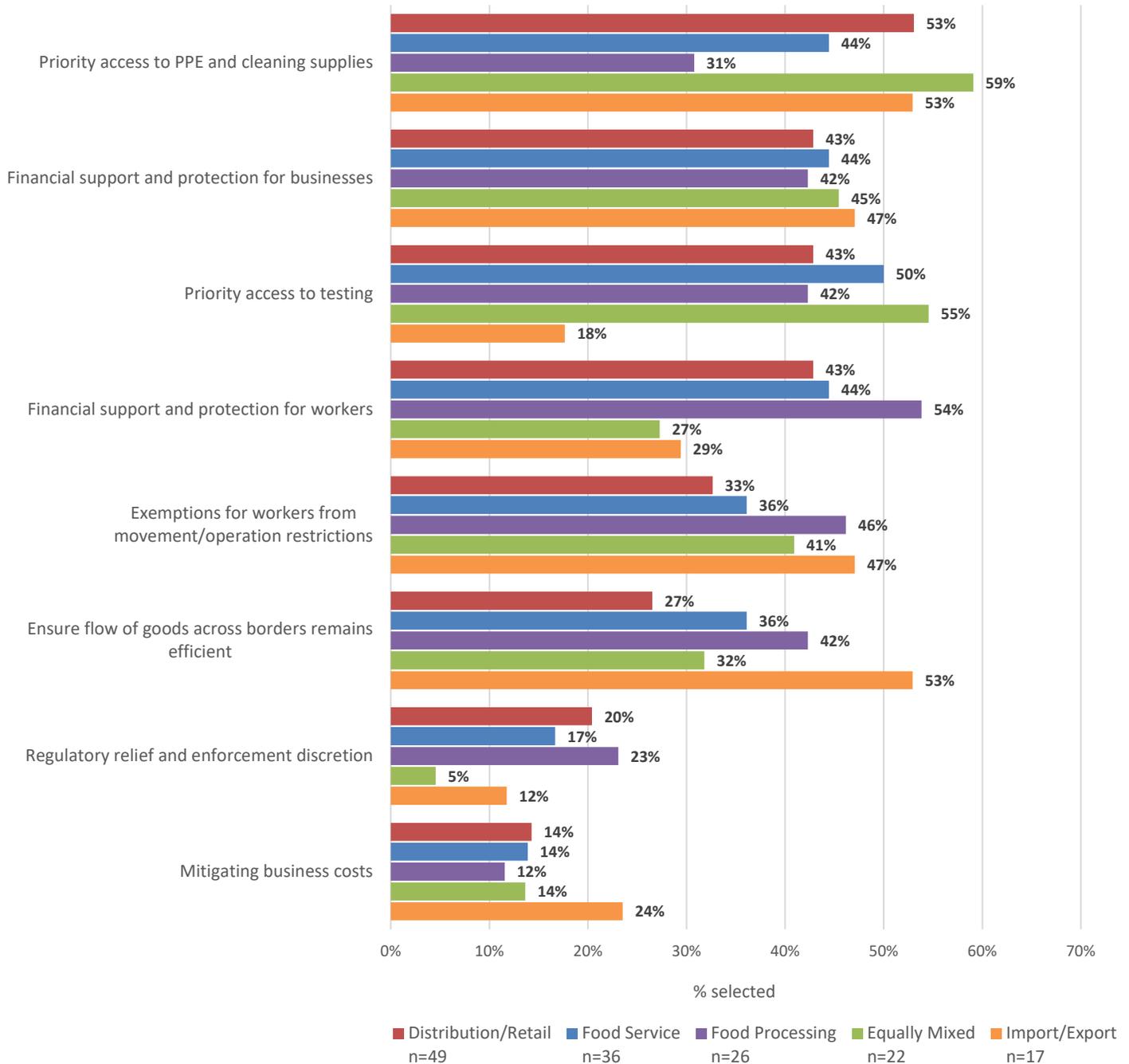
Import/Export



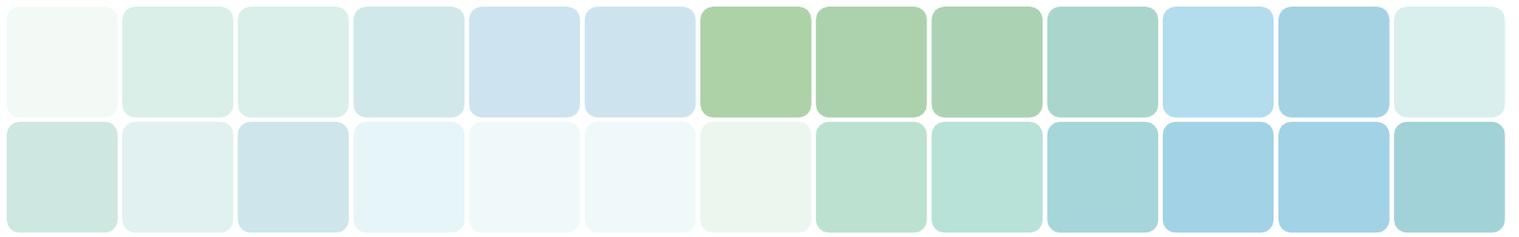


Government Priorities

What mitigation measures do you believe should be the main priorities of governments, to best protect the cold chain? *Select the top 3 answers.*



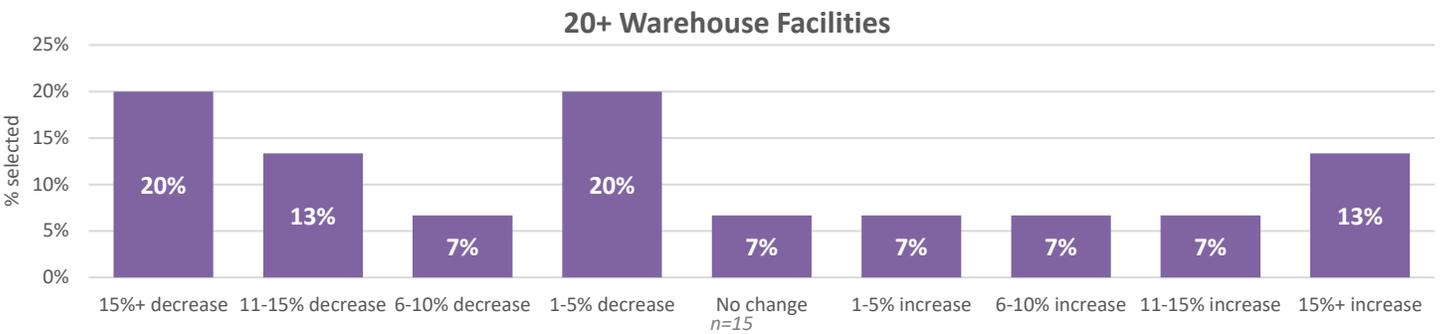
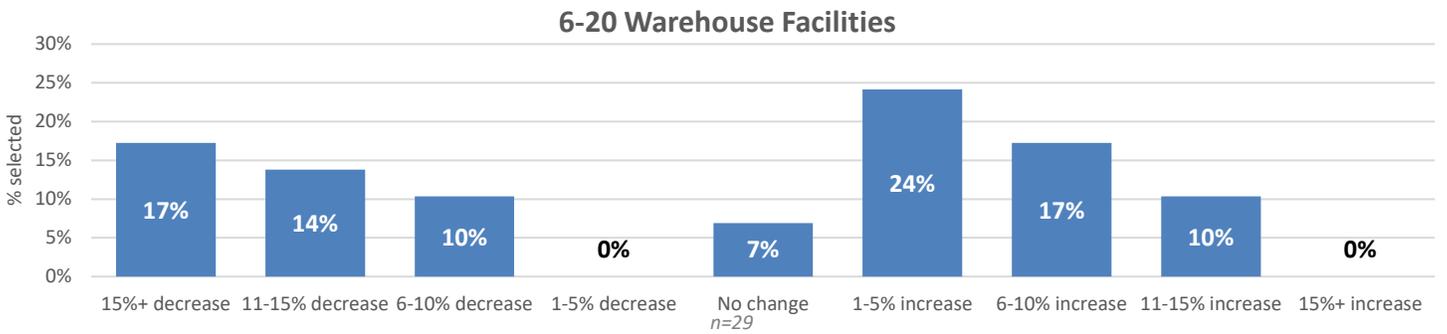
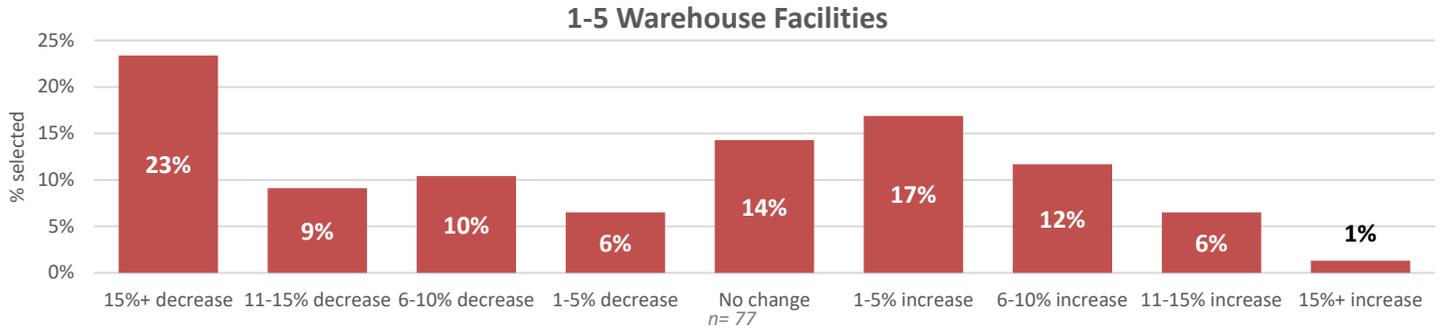
% do not add up to 100% given respondents can select up to three choices

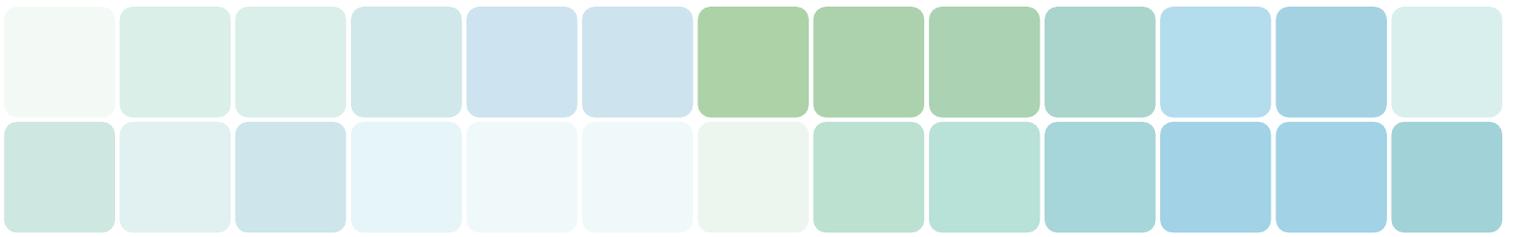


Warehouse Size Results

Financial Impact – Revenue

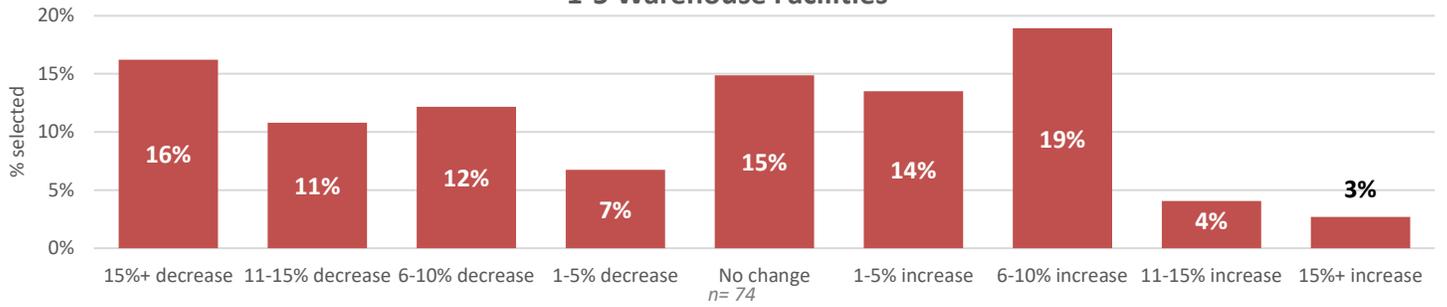
What do you believe the financial impact on revenue (percentage): a) has been to date (actual Q1-Q2 vs pre-crisis expectations)



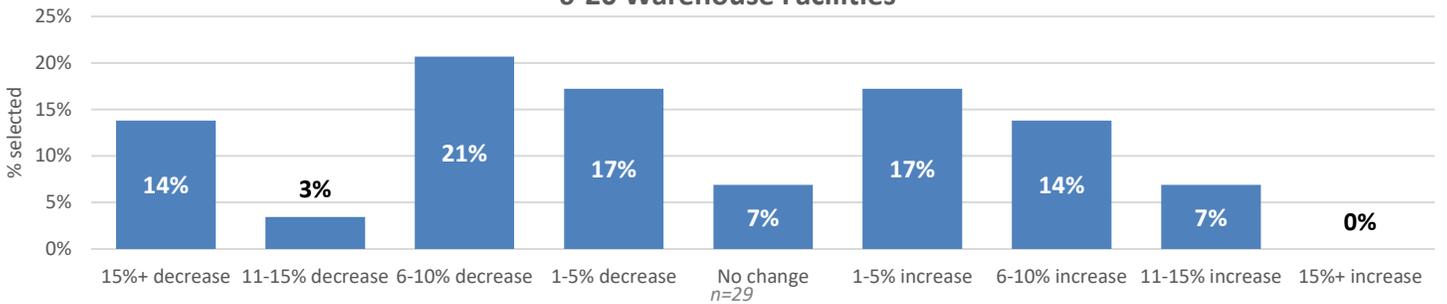


What do you believe the financial impact on revenue: could be across the next 6 months
 (actual Q1-Q2 vs pre-crisis expectations)

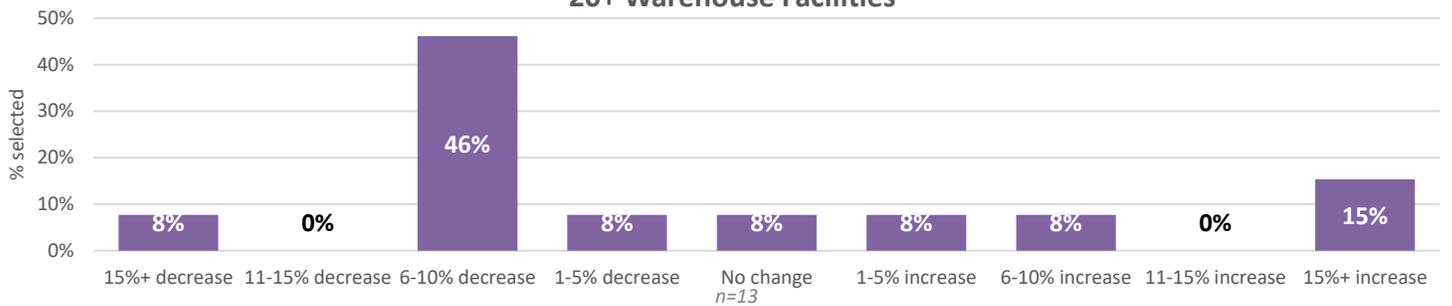
1-5 Warehouse Facilities

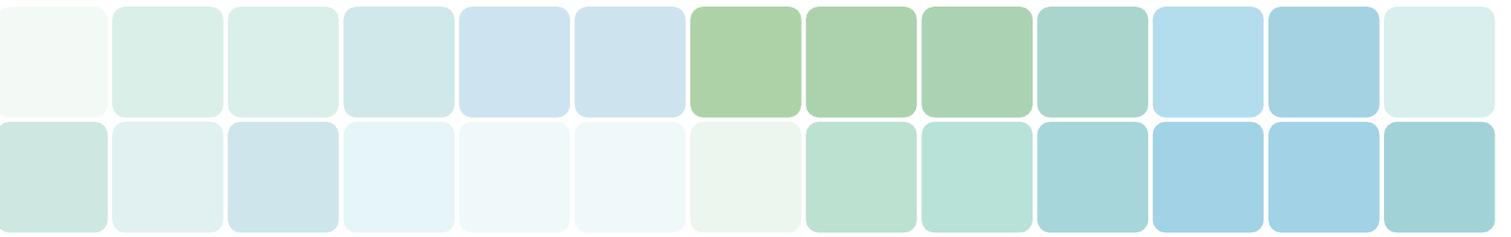


6-20 Warehouse Facilities



20+ Warehouse Facilities

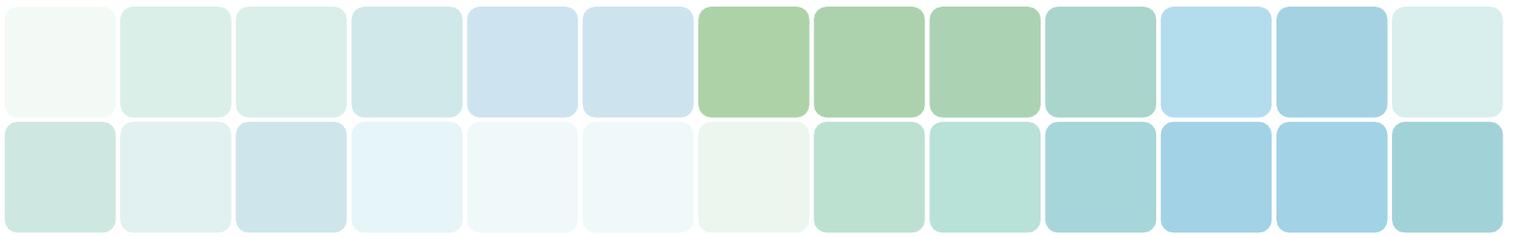




Financial Impact – Costs

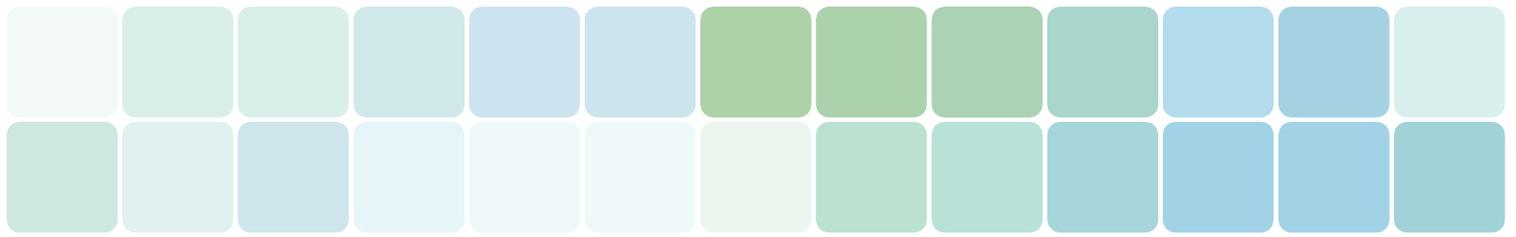
What has been the impact on your monthly cost of doing business due to any changes in work flow and/or process – extra cleaning, sanitizing, staggering work shifts, food for employees, employee transportation, overtime/appreciation pay, etc.?



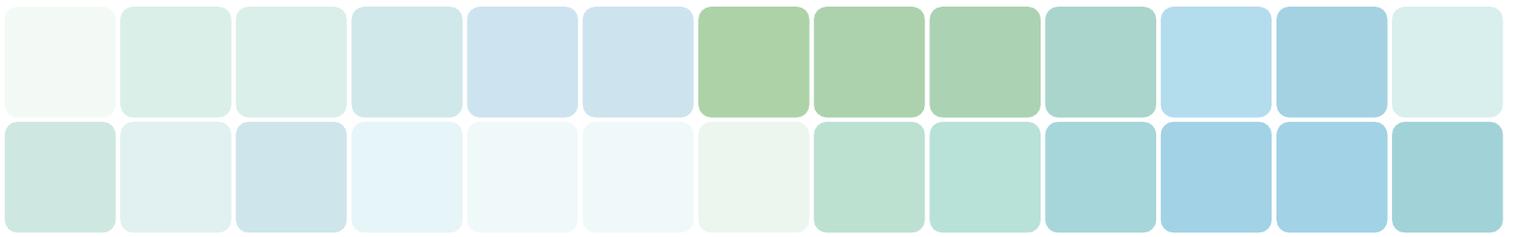


Survey Questionnaire

1. Position/Job title:
2. Company type:
 - a. Warehouse
 - i. Does your company have:
 1. 1-5 warehouse facilities
 2. 6-20 warehouse facilities
 3. 20+ warehouse facilities
 - b. Industry supplier
 - c. Asset based transportation
 - d. Non-asset-based transportation
 - e. Construction (Design/Build/Thermal Envelope Contractors)
3. Country:
4. State/Province:
5. Classify your business – warehousing, transportation, or construction – by entering the approximate percentage (%) of business supporting the following:
 - a. Percentage of Food Service Operations: _____
 - b. Percentage Distribution/Retail Operations: _____
 - c. Percentage of Food Processing Operations: _____
 - d. Percentage of Import/Export Operations: _____
 - e. Percentage of E-Commerce Operations: _____
 - f. Other (please specify): _____
6. What are the top three challenges facing your business as a result of the current COVID-19 pandemic? (Select up to 3 answers.)
 - a. Workforce shortage (e.g. absenteeism, hiring-freeze, lack of new applicants)
 - b. Access to cleaning supplies (e.g. wipes, hand sanitizer, disinfectant spray)
 - c. Access to Personal Protective Equipment (e.g. masks, gowns, face shields, thermometers)
 - d. Not enough capacity
 - e. Extra/open capacity
 - f. Government restrictions (e.g. travel restrictions, halting construction, requiring masks and/or social distancing)
 - g. Closure of non-essential businesses and facilities (e.g. closing rest stops, closing restrooms, employees finding food during breaks, limited transportation to work)
 - h. Effectively screening employees (e.g. health questionnaires, temperature checks)
 - i. Employees following safety protocols (e.g. practicing social distancing, extra cleaning routines, wearing masks)
 - j. Supply chain disruptions (e.g. keeping up with demand surge, slowdowns in food service, production/manufacturing challenges)
 - k. Managing fear of contracting COVID-19 (e.g. general risk, after positive case, driving into hot zones, working in confined areas)
 - l. Other challenge: (please specify)



7. What do you believe the financial impact on **revenue** (percentage)...
- a. has been to date (actual Q1-Q2 vs pre-crisis expectations)
 - i. 15%+ increase
 - ii. 11-15% increase
 - iii. 6-10% increase
 - iv. 1-5% increase
 - v. No change
 - vi. 1-5% decrease
 - vii. 6-10% decrease
 - viii. 11-15% decrease
 - ix. 15%+ decrease
 - b. could be across the next 6 months (actual 2020 vs pre-crisis expectations)
 - i. 15%+ increase
 - ii. 11-15% increase
 - iii. 6-10% increase
 - iv. 1-5% increase
 - v. No change
 - vi. 1-5% decrease
 - vii. 6-10% decrease
 - viii. 11-15% decrease
 - ix. 15%+ decrease
8. What has been the impact on your monthly cost of doing business due to any changes in workflow and/or process – extra cleaning, sanitizing, staggering work shifts, food for employees, employee transportation, overtime/appreciation pay, etc.?
- a. 15%+ increase
 - b. 11-15% increase
 - c. 6-10% increase
 - d. 1-5% increase
 - e. No change
 - f. 1-5% decrease
 - g. 6-10% decrease
 - h. 11-15% decrease
 - i. 15%+ decrease
9. Which of the following measures are you prioritizing as a company in reaction to the crisis? Select the top 3 answers.
- a. Workforce protection (e.g. staggered shifts, social distancing, remote working)
 - b. Workforce morale (e.g. extra communication, appreciation pay, providing lunch, highlighting individuals/teams on social media platforms, sharing family activities)
 - c. Industry awareness/Social responsibility (e.g. #essential messages, additional external communications, purchasing meals from local business to keep them open)
 - d. Employee health resources (e.g. on-site physicians/clinics, sharing medical locations, posting health best practices, health screenings)
 - e. Maintaining overall business continuity
 - f. Customer/Supplier outreach (e.g. generous payment terms, order adjustments)
 - g. Gaining/maintaining government and local authority approval to operate
 - h. Communication and accessibility (e.g. full company webinars, reoccurring team meetings, Q&A sessions, business health updates)
 - i. Other measure: (please specify)



10. What mitigation measures do you believe should be the main priorities of governments, to best protect the cold chain? Select up to 3 answers.
- Exemptions for workers from movement/operation restrictions – as “critical workers”
 - Measures to ensure flow of goods across national/international borders remains efficient
 - Financial support and protection for businesses
 - Financial support and protection for workers
 - Priority access to testing (behind healthcare and first responders)
 - Priority access to personal protective equipment and cleaning supplies (behind healthcare and first responders)
 - Regulatory relief and enforcement discretion
 - Mitigating business costs (e.g. energy)
 - Other measure: (please specify)
11. How do you believe the pandemic will change you company's operations in the future relative to pre-COVID operations? Select: Decrease – Stay the same – Increase
- Percent of employees working remotely
 - What percentage of your total employees are currently working remotely during the pandemic?
 - What percentage of all employees worked remote prior to the pandemic?
 - What percentage of all employees do you anticipate working remote after the pandemic?
 - Developing more robust SOPs/emergency plans
 - Range of value-added services provided to customers (e.g. case pick, repackaging)
 - Implementation of strict protocols for driver check-in (e.g. paperless, calling to check in)
 - Investment in automation
 - Diversifying customer base (e.g. food service, retail, distribution, processing)
 - Other change: (please specify and share decrease-stay the same-increase)
12. How do you believe the pandemic will change trends in the cold chain industry relative to pre-COVID operations? Select: Decrease – Stay the same – Increase
- Speed of transition to use of automation and robotics
 - Outsourcing by customers
 - Growth of e-commerce/direct to consumer delivery of chilled and/or frozen product
 - Diversification of temperature-controlled products in food industry
 - Replacement of old assets with new modern warehouses
 - Demand for data and predictive analytics
 - Global trade expansion opportunities
 - Growth rate of the cold chain industry
 - Other trend: (please specify and share decrease-stay the same-increase)

