

Executive Summary: 2016 Food Service Distribution Practices Survey



Prepared by Rakesh Kantharajappa and Sachin Sharma, MBA students, under the direction of Dr. Morgan Swink, Eunice and James L. West Endowed Chair of Supply Chain Management.

Center for Supply Chain Innovation, Neeley School of Business, Texas Christian University

Contents	Page
Introduction	1
Delivery Practices	2
Network Structure	4
Information Management and Performance	5
Conclusions and Call to Action	8
Appendix A: Cross Group Comparisons	9
Appendix B: Summary Statistics	10

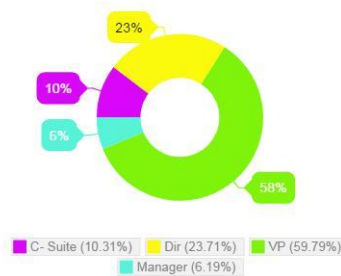
Executive Summary: Food Service Distribution Practices Survey

Introduction

The 2016 Distribution Practices Survey is the inaugural research project conducted collaboratively by the TCU Center for Supply Chain Innovation and the NRA Supply Chain Management Executive Study Group. The objective of the research project is to establish a baseline measurement of food service distribution practices in areas of network structure, delivery terms and practices, information management, and performance management. These data provide benchmarks for distribution practices in the food service industry. In addition, the data provide insights into key differences in practices across different restaurant concepts.

We surveyed 99 supply chain professionals in the food service industry, with 77% of professionals reporting to C-Suite. 58% of the surveyed executives identify themselves as Vice Presidents, 23 as Directors, 10 as C-Suite and 6 as managers. The survey asked respondents about network structure, delivery practices, information management, and performance indicators. 65% of the respondents work in organizations with less than 10 supply chain professionals and less than 15% work for companies with more than 25 supply chain professionals.

2016 Distribution Practices Survey

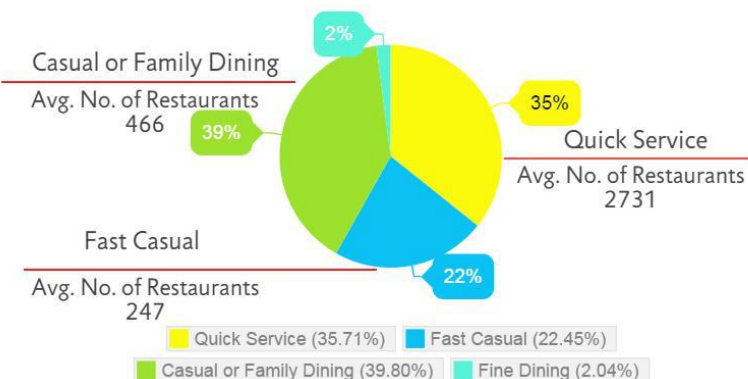


Respondent's Profile

- 77% reported to C-Suite
- 50% have 7+ experience with the company
- On Average 11.5 years experience with their current company

Restaurant Categories

Restaurants Represented: Quick Service, Fast Casual, Family Dining & Fine Dining



Respondents represent Quick Service, Fast Casual, Family Dining and Fine Dining restaurant concepts with an average of 1131 restaurant locations in each chain, with one chain reporting a maximum 24,395 locations. On average, small regional chains support 28.3 locations, national chains support 611 locations and large global chains support 10,088 locations.

In the sections that follow, we highlight some of the findings and improvement

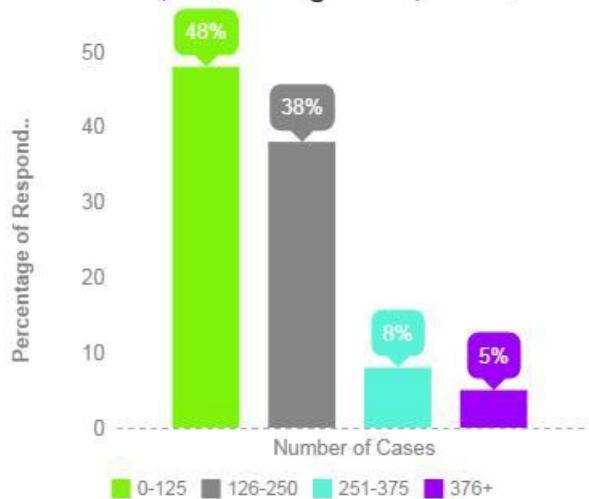
opportunities that emerged from the survey. Detailed results for the survey variables are given in Appendices A and B.

Delivery Practices

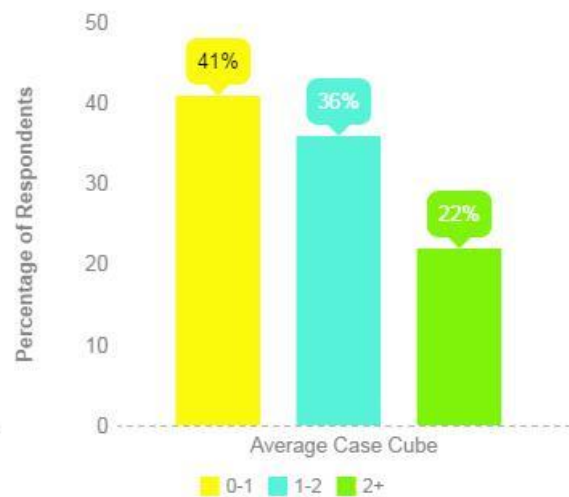
Constant change in menu items, continuous stream of limited time offers and low shelf life of food makes it important for restaurants to have highly flexible supply chains with the ability to deliver perishable shipments on time while maintaining required transit conditions to preserve the quality. Also, with a constant pressure to cut costs across the supply chain and consumer demand for stringent quality standards, there is an urgent need to rethink traditional practices and embrace advances in technology and standards.

Delivery Practices

About how many cases are shipped in each delivery to your average restaurant for this concept (average drop size)?



What is the average case cube for deliveries to restaurants for this concept?



Delivery Restrictions

More than 50% of surveyed executives indicate that their chains restrict delivery during lunch times, and roughly 40% restrict delivery during dinner times. 35% indicate that 100% of the deliveries are day drops. When we asked executives about restaurant deliveries, 40% of the respondents said that store personnel are involved in 80-100% of the deliveries, with an average of roughly 3 deliveries per week. With use of information systems for scanning and advanced tracking systems such as GS1 standards, companies can potentially reduce the involvement of store personnel. GS1 standards enable restaurants to immediately identify product, capture and share information, and rapidly respond to a food safety event. Survey responses indicate that GS1 adoption remains an untapped opportunity for many food service operations. See more discussion of this finding in the information management section below.

If operators and distributors embrace standards and collaborate to share information, they can automate restaurant receiving practices. Automated receiving reduces labor expenses by enabling unattended deliveries, and provides greater flexibility for distributors who have fewer delivery restrictions.

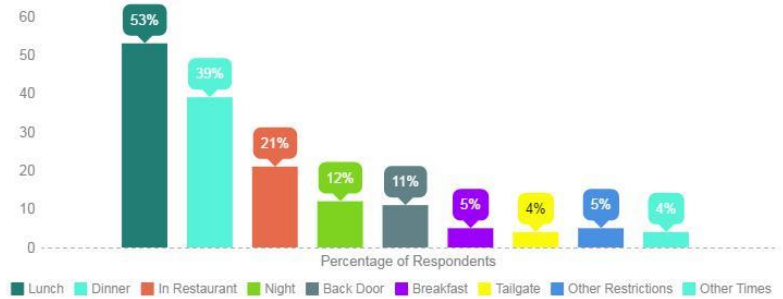
Drivers of Case Fees

33% of the industry leaders, organizations with above industry average distribution performance over the past 3 years, indicate that case fees have decreased over the past 3 years. Among leaders, case fees have dropped by 0.68% on average, whereas among others, case fees have increased by 0.48% (see Appendix A for more comparisons across leaders and others). Roughly 60% of the respondents indicate that distribution system changes and pre-determined contractual changes such as CPI adjustments are the main drivers of changes in distribution case fees.

Delivery Restrictions

40% of the respondents said that store personnel were involved in 80-100% of the deliveries

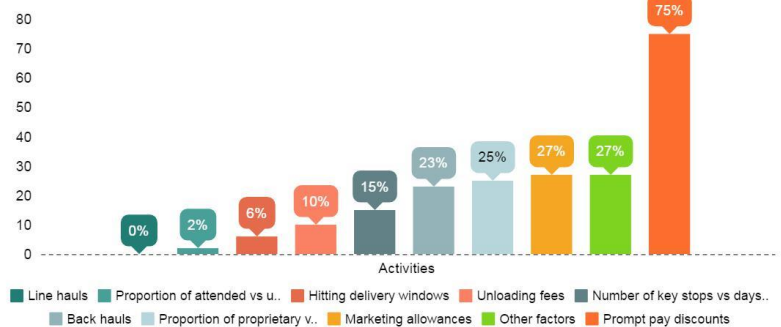
Which of the following delivery restrictions do you apply?



Drivers of Case Fees

33% of the industry leaders indicated that case fees have decreased over the past 3 years

What activities raise or lower distribution case fees in this concept?



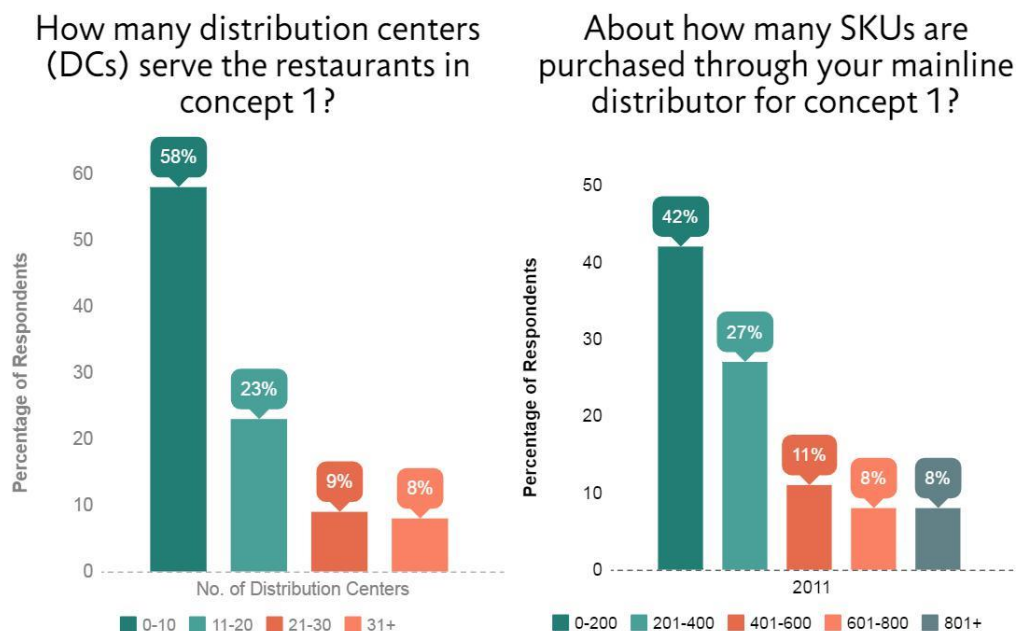
Further, prompt pay discounts are the most widely used mechanism to lower distribution case fees; roughly 76% of respondents indicate use of prompt pay discounts. Additionally, our analysis shows a strong correlation between improved backhauls and reductions in case fees. However, only 22% of the total respondents indicate any purposeful management of backhauls as a means for reducing case fees. Further analysis shows that backhaul management is a focus of 30% of industry leaders, yet only 17% of the non-industry leaders.

Network Structure

Network structures for restaurant chains vary widely due to differences in regional scope, SKU mix, and concept strategy. Leading operators are continuously revising their network strategies to capitalize on changes in economic, market, and partner conditions, while striving to support growth and profitability targets.

Distribution Centers (DCs) and Stores

Network centralization varies widely across small and large restaurant chains. The average small regional network serves 18 stores from each DC, while 58 stores are served from one DC in large national chains, and 292 stores are served by each DC in huge global chains. Small regional networks operate a total of 2 DCs on average, whereas large regional networks and huge global networks operate 16 and 40 DCs on average, respectively. At 51 stores per distribution center, family dining concepts have the lowest centralization in terms of stores per DC.



Product Breadth

When asked about the number of SKUs purchased, almost 70% of the respondents indicated that fewer than 400 SKUs are purchased through mainline distributors for a given concept, with an overall average of 441 SKUs across all respondents. Across all concepts supported, average SKU count for a chain jumped to 907. Additionally, respondents indicated that on average 49% of the SKUs are proprietary, with a maximum of 95% proprietary SKUs at one chain. Further analysis points out that spend on proprietary SKUs is lowest for family dining restaurants at 51%.

Redistribution

About 64% of respondents state that their organization utilizes redistributors, mostly for dry items - close to 50% of respondents purchase dry item through redistributors. Refrigerated and frozen products are the least preferred items for redistribution, with only 13% and 23% of respondents reporting redistribution for these items. Analysis of the impact of proprietary SKUs on the redistribution policy adopted by restaurants shows a strong positive correlation between spend on proprietary SKUs and the number of redistribution companies used. Only 46% of the respondents who identify themselves as industry leaders utilize redistribution, whereas 71% of the other respondents use redistribution.

Information Management and Performance

Supply chain managers in foodservice industries must ensure all products are available at the required time and in the proper condition. When something inevitably goes wrong, supply chain professionals identify the source of the problem, remove effected products, and work with partners to trace root causes. All this is done in the face constantly evolving menus, promotions and customer requirements, taking an enormous amount of coordination and information sharing throughout the value chain.

Data Feeds

When asked about information sharing throughout the value chain, more than 60% of the respondents said their companies only shared information about restaurant invoices, inventory positions and inbound purchase orders. Even though close to 66% of the respondents use bar code scanning in either DCs or at the time of delivery to restaurants, the full potential of GS1 standards does not appear to be realized in most firms. Only 6% of the respondents said their organization uses GS1 standards in most areas of the supply chain, and about 49% of respondents indicate that their organizations use GS1 standards for some aspects of supply chain, but do not completely embrace it. GS1 standards provide the capability to easily record and share consistent information about not just products and quality attributes, but also about logistics, location of production and storage facilities.¹

¹ TCU and the NRA are launching a study of GS1 adoption and maturity in foodservice. See <http://www.supplychainscene.org> for an initial white paper and more information on this research project.

Data Feeds

GS1 standards provide the capability to easily record and share consistent information about not just products and quality attributes but also about logistics, location of production and storage facilities.



66% of the respondents used bar code scanning

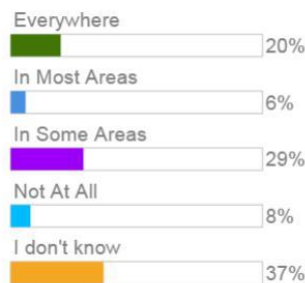


6% of the respondents used GS1 standards in most areas

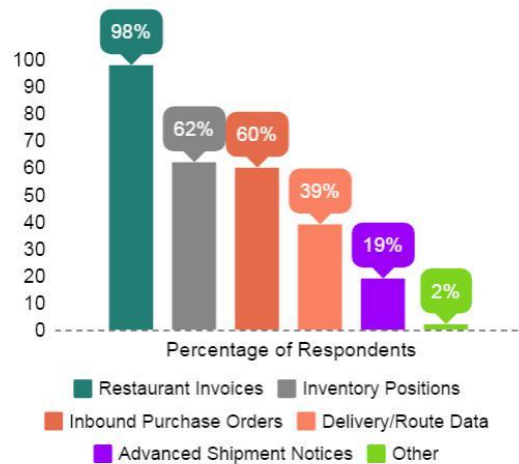


Inconsistent data can be a major source of in-efficiency

GS1 Adoption



What types of data feeds do your distributors supply for this concept?



Inconsistent data can be a major source of inefficiency, especially when data feeds are not standardized. The survey results point to a surprising lack of data availability for most operators. Almost 40% of operators receive no data from distributors beyond invoices. Only 39% of respondents indicate that they receive delivery/route data. This lack of visibility severely limits inventory optimization and can make it difficult to manage precise item recalls.

Performance Metrics (KPIs)

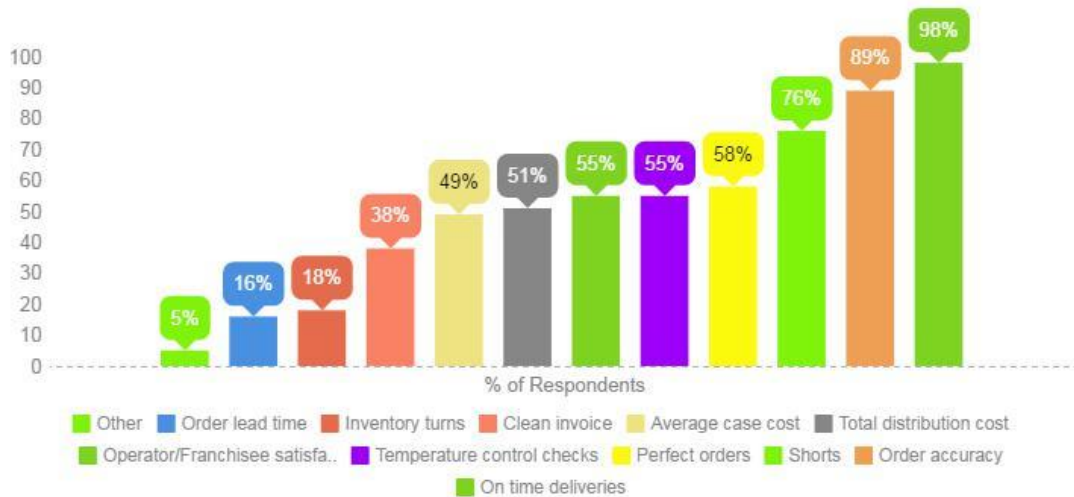
As with the information management findings, the survey results suggest that distribution performance measurement is another important opportunity for improvement in many restaurant chains. Measurement of on time deliveries (98%) is the most widely used KPI, followed closely by order accuracy (89%). The average respondent indicated that his/her organization tracks 6 KPI's, with some organizations tracking as many as 10 KPI's and others tracking as few as 3. Order lead times and inventory turns are the least used KPI's, with a usage rate of only about 15-18% among the organizations surveyed.

Key Performance Indicators

On time deliveries (98%) is the most widely used KPI

Order lead times and inventory turns are the least used KPI's

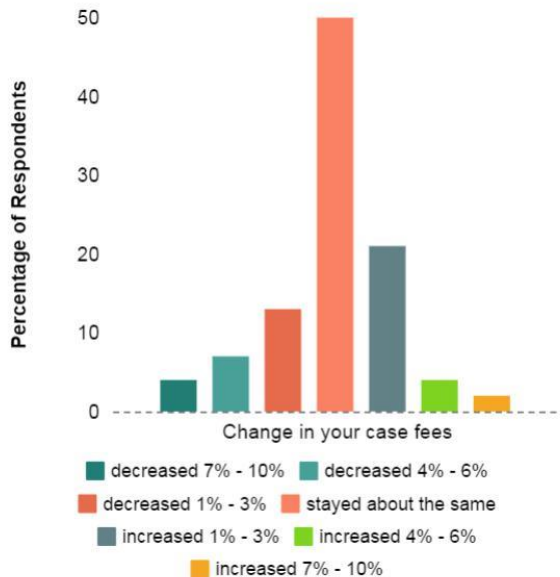
On average 6 KPI's tracked, with a maximum of 10 KPI's & minimum of 3 KPI's



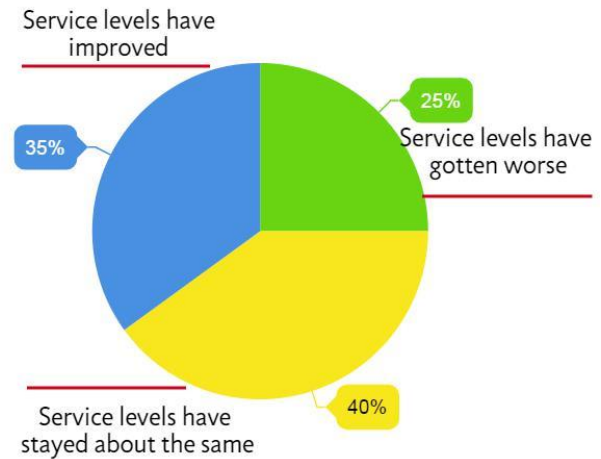
Cost and Service

While 40-50% of respondents indicate that cost and service performance has remained about the same over the last three years, other respondents provided a wide variance in performance changes of the same period. Industry leaders (those that perceived that their organizations are leaders) were twice as likely to state that case fees and service levels have improved over the three-year period. Interestingly, leaders on average operate about half as many DCs and are less likely to use redistributors, reflecting more centralized distribution strategies. They are also more likely to manage their own freight.

Over the past three years, what has been the average yearly change in your case fees?



Over the past three years, what has been the trend for distributor service levels for this concept?



Conclusions and Call to Action

The NRA-TCU distribution practices survey establishes some early benchmarks regarding network design, delivery terms, information management, and performance for food service operators. The data portray an industry with widely varying levels of practice and performance. Food service operators appear to have significant opportunities for advancement and competitive advantage. In particular, information and performance management offer potentially fruitful areas of improvement. Operators that drive initiatives to create better visibility, traceability, and real-time performance acuity in their distribution networks can simultaneously improve flexibilities and efficiencies in logistical processes. Such improvements will likely require significant investments in technology, improved data accuracy, and supply chain partnerships.

This research project is a collaboration of the NRA Supply Chain Management Executive Study Group and the Neeley School of Business Center for Supply Chain Innovation

For more information, please contact Dr. Morgan Swink, m.swink@tcu.edu

Appendix A: Cross Group Comparisons

The data below describe statistically significant differences in averages for selected variables across groups.

	Quick Service (N=28)	Fast Casual (N=17)	Casual and Family Dining (N=32)
Percentage reporting growth	75%	78%	42%
Number of restaurants	2731	247	466
Percentage of stores that are franchised	62%	52%	20%
Percentage of spend on proprietary items	75%	64%	51%
Stores per DC	99	77	51
Cases per delivery	105	136	189
Number of data feed types from distributors	3.4	2.8	2.5
Number of redistribution companies used	1.9	1.3	2.1

	Leaders* (N=24)	Others (N=31)
Percent indicating that case fees have decreased over past 3 years	33%	13%
Average percent change in case fees	-0.63%	0.48%
Percent indicating that service levels have improved over past 3 years	54%	19%
DCs per concept	6.10	13.60
Percent who use redistribution	46%	71%
Percent who manages the inbound freight to DCs	29%	15%

	Small Regional Chains N=26	Large National Chains N=48	Huge Global Chains N=5
Sales (millions)	82.7	892.7	7000.0
How many U.S. restaurant locations are supported for this concept?	28.3	611.5	10088.8
Percentage of restaurant locations that are franchised	13.6	50.5	68.0
About how many SKUs are purchased through your mainline distributor for concept 1?	369.1	423.3	1400.0
What is your approximate annual \$ spend on these items for concept 1? (millions)	15.9	267.0	n/a
Percentage of total SKU count that is proprietary	37.4	52.9	68.7
Percentage of total dollar spend that is proprietary	43.0	64.5	80.7
How many distribution centers (DCs) serve the restaurants in concept 1?	2.3	16.4	40.3
Stores per DC	17.7	57.5	292.0
SC Employees per concept	5.1	9.4	83.3
Restaurants per SC employee	27.4	129.3	81.3
Purchase spend (millions) per SC employee	4.95	1.56	n/a
DCs per concept	1.3	10.7	49.0

Appendix B: Summary Statistics

Distribution Practices Survey - Summary Statistics	Total Sample				
	N	Minimum	Maximum	Mean	Std. Deviation
Background information					
Q29 - About how many employees work in your company's supply chain function?	85	1	3000	59.76	334.526
Q30 - About how many employees work in distribution and logistics in your supply...	87	0.0	1600.0	24.374	171.3400
Q22 - How many different restaurant concepts (brands) does your organization support?	94	1	20	3.28	4.081
Q25 - Most recent total annual sales for the concept (millions)?	82	25	7000	1053.05	1844.438
Q26 - How many U.S. restaurant locations are supported for this concept?	83	0.0	24395.0	1131.3	3249.9
Annual sales per restaurant (millions)	78	\$ 0.17	\$ 20.59	\$ 3.32	\$ 3.34
Number of supply chain employees per 100 restaurant locations	71	0.3	205.9	14.8	32.7
Restaurants per supply chain employee	71	0.5	680.0	95.3	146.9
SKUs per supply chain employee	67	0.8	7800.0	318.9	995.7
Number of chains that span multiple regions (Region=2) vs single region (Region=1)	84	1.0	2.0	1.7	0.5
Number of chains that are Small/regional (=1); Large_national (=2); Huge_global (=3)	79	1.0	3.0	1.7	0.6
Q28_1 - Percentage of restaurant locations that are franchised	82	0.0	100.0	41.5	40.5
What has been the average overall percentage sales growth over the past 2 years?	84	-5.0	5.0	2.0	2.8
Number of responses of Sales Growth=1;Steady Sales=0;Sales Decline=-1	84	-1.0	1.0	0.5	0.7
The Mainline Distribution Network					
Q187 - About how many SKUs are purchased through all mainline distributors for all concepts?	70	0.0	7800.0	907.1	1321.9
Q37 - About how many SKUs are purchased through your mainline distributor for concept 1?	68	0.0	3500.0	441.9	574.4
Q38 - What is your approximate annual \$ spend on these items for concept 1?	33	\$2,000,000	\$1,200,000,000	\$177,097,939	\$ 319,057,180
Spend per supply chain employee (\$)	31	\$ 18,750	\$ 38,500,000	\$ 11,724,468	\$ 11,618,147
Q39_1 - Percentage of total SKU count that is proprietary	70	1.0	95.0	48.8	27.0
Q39_2 - Percentage of total dollar spend that is proprietary	69	0.0	98.0	58.2	30.4
Q40_1 - % Dry items	76	0.0	95.0	23.8	17.2
Q40_2 - % Refrigerated items	76	0.0	80.0	34.6	21.3
Q40_3 - % Frozen items	76	0.0	80.0	22.5	20.4
Q40_4 - % Other	76	0.0	100.0	6.8	19.9
Q40_5 - If you don't know the answer, indicate 100% here	76	0.0	100.0	11.7	30.0
Q188 - How many distribution centers (DCs) serve the restaurants included in all cncpts?	71	0.0	100.0	13.2	16.2
DCs per concept	71	0.0	100.0	9.7	14.9
SKUs per concept	49	1.0	1.0	1.0	0.0
Q41 - How many distribution centers (DCs) serve the restaurants in concept 1?	72	1.0	120.0	12.8	18.0
Stores per DC	70	0.0	750.0	67.3	142.7
Q42_1 - % of DCs owned by your company	69	0.0	100.0	7.6	24.5
Q43 - For contract DCs (not owned) serving this concept, how many different distribution or 3PLs involved?	63	0.0	100.0	9.7	22.1
Percentage of distribution contracts that are of the following lengths?					
Q44_1 - 0-1 years	63	0.0	100.0	25.0	40.4
Q44_2 - 1-3 years	63	0.0	100.0	23.7	39.6
Q44_3 - 3-5 years	63	0.0	100.0	34.4	45.0
Q44_4 - More than 5 years	56	0.0	100.0	13.6	33.6
Q44_5 - If you don't know the answer, indicate 100% here	56	0.0	0.0	0.0	0.0
Average contract length	56	0.5	7.0	3.1	2.0
Q46 - Across all concepts, how many redistribution companies are used?	42	1.0	4.0	1.8	0.8
Q47 - Across all concepts, how many redistribution facilities are used?	41	1.0	22.0	3.0	3.6
Q190 - How many redistribution companies are used for concept 1?	35	1.0	4.0	1.7	0.8
Q191 - How many redistribution facilities are used for concept 1?	34	1.0	22.0	3.3	4.0
Q48 What percentage of the products that are put through redistribution for concept 1 are in the following categories?					
Q48_1 - Dry items	30	0.0	100.0	54.3	33.4
Q48_2 - Refrigerated items	29	0.0	79.0	15.7	20.9
Q48_3 - Frozen items	29	0.0	95.0	27.6	27.6
Q48_4 - Other (please describe)	29	0.0	18.0	0.6	3.3
Q48_5 - If you don't know the answer, please indicate 100% here.	34	0.0	100.0	14.6	35.6
Q49 What percentage of in-bound freight to DCs serving this concept is managed by each party shown below					
Q49_1 - My company manages the freight	62	0.0	100.0	23.2	29.6
Q49_2 - Contract DCs manage the freight	62	0.0	90.0	31.5	24.1
Q49_3 - Vendors manage the freight	62	0.0	100.0	38.0	26.0
Q49_4 - Other (please describe)	62	0.0	100.0	2.4	13.4
Q49_5 - If you don't know the answer, indicate 100% here	62	0.0	100.0	4.9	21.6
Q50_1 - % inbound deliveries to DCs that are full truck loads	51	0.0	100.0	48.9	31.0

Distribution Practices Survey - Summary Statistics	Total Sample				
	N	Minimum	Maximum	Mean	Std. Deviation
Q51 Which categories for this concept are distributed using distributors other than mainline?					
Produce					
Q51_1_1 - Number of distributors	57	0.0	50.0	8.1	14.4
Q51_1_2 - Number of facilities	47	0.0	97.0	14.2	22.9
Q51_1_3 - Annual \$ spend on purchases	41	\$ -	\$ 150,000,000	\$ 16,338,537	\$ 38,751,048
Q51_1_4 - Number of SKUs	44	0.0	180.0	29.0	34.6
Dairy					
Q51_2_1 - Number of distributors	52	0.0	35.0	2.0	6.3
Q51_2_2 - Number of facilities	41	0.0	35.0	2.8	7.3
Q51_2_3 - Annual \$ spend on purchases	38	\$ -	\$ 70,000,000	\$ 2,737,500	\$ 11,441,806
Q51_2_4 - Number of SKUs	40	0.0	50.0	3.6	9.4
Fresh Bakery					
Q51_6_1 - Number of distributors	54	0.0	189.0	7.1	26.8
Q51_6_2 - Number of facilities	44	0.0	189.0	12.3	31.4
Q51_6_3 - Annual \$ spend on purchases	40	\$ -	\$ 21,000,000	\$ 2,488,625	\$ 5,169,491
Q51_6_4 - Number of SKUs	44	0.0	85.0	5.6	14.0
Small wares					
Q51_3_1 - Number of distributors	56	0.0	5.0	1.5	1.3
Q51_3_2 - Number of facilities	49	0.0	25.0	3.4	4.5
Q51_3_3 - Annual \$ spend on purchases	41	\$ -	\$ 25,000,000	\$ 3,948,512	\$ 7,235,756
Q51_3_4 - Number of SKUs	44	0.0	15000.0	619.2	2252.2
Equipment					
Q51_4_1 - Number of distributors	52	0.0	20.0	1.8	2.9
Q51_4_2 - Number of facilities	45	0.0	20.0	2.8	4.1
Q51_4_3 - Annual \$ spend on purchases	39	\$ -	\$ 50,000,000	\$ 8,523,615	\$ 14,845,138
Q51_4_4 - Number of SKUs	41	0.0	2000.0	98.5	313.7
Other					
Q51_5_1 - Number of distributors	33	0.0	350.0	20.8	78.8
Q51_5_2 - Number of facilities	29	0.0	450.0	33.1	115.6
Q51_5_3 - Annual \$ spend on purchases	30	\$ -	\$ 250,000,000	\$ 17,178,167	\$ 57,242,835
Q51_5_4 - Number of SKUs	29	0.0	370.0	27.7	81.5
Total nonmainline SKUs	27	3.0	17000.0	1156.9	3208.2
Total nonmainline spend	26	\$ 100,000	\$ 395,000,000	\$ 64,055,000	\$ 101,066,876
Total nonmainline Distributors	28	0.0	391.0	54.5	98.4
Total nonmainline facilities	27	1.0	513.0	80.9	136.6
Ratio (%) of mainline to nonmainline SKUs	26	0.0	83.3	6.0	16.5
Ratio (%) of mainline to nonmainline spend	15	0.3	14.5	4.6	4.2
Deliveries to Restaurants from Mainline Distributors					
Q2_1 - % of dedicated delivery routes	45	0.0	100.0	24.5	33.6
Q3 - How many cases are shipped in each delivery to your average restaurant?	54	30.0	400.0	151.0	84.0
Q207 - What is the average case cube for deliveries to restaurants for this concept?	28	0.0	175.5	23.8	46.7
Q4 - About how many deliveries are made to each restaurant for this concept per week?	54	1.0	28.0	2.6	3.6
Total number of cases delivered per week to average restaurant	52	40.0	1050.0	361.5	256.0
Q6_1 - What percentage of deliveries are day drops (not night drops)?	56	4.0	100.0	66.0	31.2
Q6_2 - What percentage of deliveries do store personnel participate in the delivery/receiving process?	53	0.0	100.0	51.8	43.6

Distribution Practices Survey - Summary Statistics	Total Sample				
	N	Minimum	Maximum	Mean	Std. Deviation
Distribution Information and Performance Measurement					
Q9 - What activities raise or lower distribution case fees in this concept? (mean is % respondents who selected)	55	0.0	1.0	0.2	0.4
line haul	55	0.0	0.0	0.0	0.0
unloading fees	55	0.0	1.0	0.1	0.3
prompt pay discounts	55	0.0	1.0	0.7	0.5
hitting delivery windows	55	0.0	1.0	0.1	0.2
proportion proprietary vs distributor items	55	0.0	1.0	0.2	0.4
number of key stops vs day stops	55	0.0	1.0	0.1	0.4
proportion of attended vs unattended deliveries	55	0.0	1.0	0.0	0.1
marketing allowances	55	0.0	1.0	0.3	0.4
other case fee factors	55	0.0	1.0	0.3	0.5
Q10 What types of data feeds do your distributors supply? (mean = % respondents who selected "yes")					
Q10#1_1 - Restaurant invoices	54	0.0	1.0	1.0	0.2
Q10#1_2 - Inventory positions	54	0.0	1.0	0.6	0.5
Q10#1_3 - Inbound purchase orders	54	0.0	1.0	0.6	0.5
Q10#1_5 - Delivery/route data (i.e. truck tracker or uber)	54	0.0	1.0	0.4	0.5
Q10#1_7 - Advanced shipment notices (ASNs)	54	0.0	1.0	0.2	0.4
Q10#1_4 - Other (please specify)	54	0.0	1.0	0.0	0.1
Total number of data feeds supplied	54	0.0	5.0	2.8	1.2
Q15 - Which of the following are key performance indicators (KPIs) that you use for your distribution system?					
on time deliveries	55	0.0	1.0	1.0	0.1
order accuracy	55	0.0	1.0	0.9	0.3
order lead time	55	0.0	1.0	0.2	0.4
perfect order	55	0.0	1.0	0.6	0.5
shorts	55	0.0	1.0	0.8	0.4
clean invoice	55	0.0	1.0	0.4	0.5
inventory turns	55	0.0	1.0	0.2	0.4
avg case cost	55	0.0	1.0	0.5	0.5
total distribution cost	55	0.0	1.0	0.5	0.5
operator/franchisee satisfaction	55	0.0	1.0	0.5	0.5
temperature control	55	0.0	1.0	0.5	0.5
other KPIs	55	0.0	1.0	0.1	0.2
Total number of KPIs used	55	3.0	10.0	6.1	1.9
Q199 Which statement best describes your overall distribution performance compared to others? (above avg=1; avg=2; below avg=3)	55	1.0	3.0	1.7	0.6
Q17 Over the past three years, what has been the average yearly % change in your mainline distribution case fees for this concept?	56	-8.5	8.5	-0.2	2.8
Q203 Over the past three years, what has been the trend for distributor service levels for this concept? (improved=1; stayed same=2; worse=3)	55	-1.0	1.0	0.1	0.8
Q18 Approximately what percentage of the change in distribution case fees is attributable to the following factors?					
Q18_1 - External factors you don't have control over	49	0.0	100.0	16.5	28.6
Q18_2 - Actions you have taken to change the distribution system	49	0.0	100.0	33.3	35.4
Q18_3 - Growth or decline in your overall business	49	0.0	80.0	15.4	23.3
Q18_6 - Automatic or pre-determined contractual changes such as CPI adjustments, etc.	48	0.0	100.0	23.4	38.5
Q18_4 - Other (please specify)	49	0.0	100.0	10.8	28.6
Q18_5 - If you don't know the answer, indicate 100% here	57	0.0	100.0	15.0	35.4