Instructions

The MPI Distribution and Logistics Study

Please provide a response to each question based on a single distribution center/warehouse facility. If you are a corporate executive, encourage all of your facilities to complete this questionnaire, or you can complete the questionnaire for a single facility representative of your organization.

If you would like to receive a complimentary Executive Summary of study findings, please provide contact information at the end of the questionnaire, prior to submitting.

Profile

1. Is this facility part of a public or private company?

Public

Private

2. Does this facility generate sales and profits or is it operated as a cost center?

Sales and profit facility Cost center

3. Which of the following best describes the organization that operates this facility?

Manufacturer (equipment/machinery) Manufacturer (consumer products) Manufacturer (transportation equipment) Manufacturer (high-tech/electronics) Manufacturer (food and beverage) Manufacturer (other) Wholesaler/distributor (equipment/machinery) Wholesaler/distributor (consumer products) Wholesaler/distributor (transportation equipment) Wholesaler/distributor (high-tech/electronics) Wholesaler/distributor (food and beverage) Wholesaler/distributor (other) Retailer 3rd-party logistics provider Service provider Government/utilities/military Other (please specify):

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4. What percentage of facility volume is shipped to the following types of customers? (total must equal 100%)

Manufacturer	0
Consumer	0
Retailer	0
Wholesaler/distributor	0
Government/utilities/military	0
Other	0
Total	0

5. How many years has this facility been in operation?

Less than 5 years

5 to 10 years

11 to 20 years 21 to 30 years More than 30 years

6. What are the annual sales handled by this facility?

(If this facility is a cost center, report value of shipments.)

Less than \$5 million \$5 million to \$25 million \$26 million to \$50 million \$50 million to \$100 million \$101 million to \$250 million \$251 million to \$500 million \$500 million to \$1 billion More than \$1 billion

7. By what percentage do you expect sales (or value of shipments) to change in the next 12 months?

More than 20% increase 11% to 20% increase 6% to 10% increase 1% to 5% increase No change 1% to 5% decrease 6% to 10% decrease 11% to 20% decrease More than 20% decrease

8. By what percentage do you expect the volume of shipments to change in the next 12 months?

More than 20% increase 11% to 20% increase 6% to 10% increase 1% to 5% increase No change 1% to 5% decrease 6% to 10% decrease 11% to 20% decrease More than 20% decrease

9. What is the percentage of work hours devoted to the following at this facility? (total must equal 100%)

Broken case picking (piece pick)	0
Full case picking	0
Partial pallet picking	0
Full pallet picking	0
Other	0
Total	0

10. Please estimate the approximate square footage of this facility: (no commas or decimals required)

11. What percentage of this facility's square footage is devoted to the following? (total must equal 100%)

Receiving	0
Storage	0
Shipping	0
Pick and pack	0
Other	0
Total	0

12. What is the approximate price (per SKU) of the primary products that this facility handles?

Less than \$10 \$10 to \$50 \$51 to \$100 \$101 to \$1,000 \$1,001 to \$5,000

More than \$5,000

13. What is the total number of SKUs handled annually through this facility? (no commas or decimals required)

14. How much progress has this facility made in becoming a world-class operation?

No progress

Some progress

Significant progress

Fully achieved

Human Resources

15. How many employees work at this facility?

Less than 20

21 to 50

51 to 100

101 to 250

251 to 500

501 to 1,000

More than 1,000

16. What percentage of employees are in following roles at this facility? (total must equal 100%)

Direct labor/frontline	0
Supervisor	0
Management/leadership	0
Maintenance staff	0
Support staff (e.g., information technology)	0
Transportation	0
Other	0
Total	0

17. What are the following HR percentages for this facility?

	0	10	20	30	40	50	60	70	80	90	100
Percentage of employees represented by a union(s)											
Annual labor turnover rate (number of voluntary and involuntary separations as percentage of typical staffing level)											
Absentee rate (annual days employees are absent as percentage of total annual employee days)											

18. How many hours of training does this facility provide annually to each employee?

Less than 10 hours

10 to 20 hours

21 to 30 hours

31 to 40 hours

19. What percentage of employees participate in empowered or self-directed work teams?

	0	10	20	30	40	50	60	70	80	90	100
Percentage empowered/self-directe employee	ed										

20. Which of the following human-resources practices/programs are in place at this facility? (select all that apply)

Formal employee training program

Apprenticeship program

- Teaming/team-building practices
- Leader/supervisor development
- Recruiting and hiring program
- Paid medical benefits
- Paid sick and/or personal days
- Formal safety/health program
- Paid vacation days
 - Annual review and raise program
- Employee-ownership options
- Profit or revenue-sharing plan
- Bonus plan
- Education reimbursements
- None of these

21. What percentage of current staff are temporary workers?

	0	10	20	30	40	50	60	70	80	90	100
Percentage of temporary staf											

22. Which of the following best describes this facility's wages?

Lowest in the market Below market rate At market rate Above market rate

Highest in the market

23. For the most recent calendar year, what was this facility's OSHA recordable incident rate?

(If this facility does not report to OSHA, multiply the number of recordable injury and illness cases for the year by 200,000, and then divide that number by number of total facility labor hours.)

Operations

24. Which of the following practices are in place at this facility? (select all that apply)

Continuous-improvement program Benchmarking Lean thinking/lean material management Quality certifications (e.g., ISO) Total productive maintenance Waste elimination Strategy deployment Three-year planning process Value-stream/process mapping Kaizen events/blitzes Daily work huddles/team meetings Six Sigma concepts PDCA-style problem solving Supplier criteria and monitoring None of these

25. Which of the following services are performed by this facility? (select all that apply)

Product returns	
Relabeling/repackaging	
Kitting	
Light manufacturing/assembly	
Reverse logistics	
Sequencing	
RFID labeling	
3D printing/additive manufacturing	
Cross-docking	
	Other (please specify):

None of the above

26. What are the following average performance metrics (%) for this facility?

Reliability

	0	10	20	30	40	50	60	70	80	90	100
Perfect order fulfillment (as % of total orders)											
Order delivery in full (as % of total orders)											
Delivery fulfillment to customer's original committed date (as % of total orders)											

Responsiveness

Order-receipt to order-confirm time (minutes)

Order-confirm to order-pick time (minutes)

Order-pick to order-ship time (minutes)

Order-ship to order-received at customer (days)

Speed

Lines picked per hour

Items picked per hour

Cases picked per hour

Dock-to-stock time (receipt to storage time in hours)

Productivity

	0	10	20	30	40	50	60	70	80	90	100
Warehouse capacity utilization (occupied capacity as a % of total capacity)											
Lost sales (orders lost due to stockout as % of total orders)											
Backorders (backorders as % of total orders)											
Returns (goods returned as % of total goods)											

27. In the event of a sustained 25% demand increase, how many days does it take to increase the following?

0
30
60
90
120
150
180
210
240
270
300
330
360

Warehouse labor
Transportation labor
Varehouse space
Varehouse spa

28. What is the customer delivery lead time in days for typical orders? (receipt of order to delivery to customer)

29. What is the total inventory turn rate for this facility (annual dollar value of shipments divided by average

on-hand inventory)?

30. What percentage of total delivered product volume (dollar value) is returned?

0 10 20 30 40 50 60 70 80 90 100 Percentage of returns

31. What are total facility operating expenses as a percentage of sales (or of the value of shipments, if facility is a cost center)?

Total facility operating expenses include labor cost, cost of purchased material and goods handled by facility, overhead costs, sales and marketing costs, R&D costs, and general and administrative costs.

	0	10	20	30	40	50	60	70	80	90	100
Facility operating expenses as % of sales											

32. How have operating expenses as a percentage of sales changed in the past 12 months?

Increased more than 10% Increased 6% to 10% Increased 1% to 5% No change Decreased 1% to 5% Decreased 6% to 10% Decreased more than 10%

33. What are the following costs as a percentage of total facility operating expenses? (total of the three percentages typically should not exceed 100%)

0 10 20 30 40 50 60 70 80 90 100	0	10	20	30	40	50	60	70	80	90	100
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Labor (wages, income taxes, employee benefits, etc.)

Direct materials (purchased material or goods the facility handles, including landed costs such as freight, duties, insurance, tariffs, etc.)

Overhead (indirect costs associated fulfillment, including utilities, rent, repairs)

Supply-Chain and Logistics

34. How many supplier locations delivered to this facility in the past year? (no commas or decimals required)

35. How many customer sites did this facility deliver to in the past year? (no commas or decimals required)



36. To what extent are this facility's business systems and operations information integrated with that of:

	No integration	Some integration	Significant integration
Corporate offices	0	0	0
Customers	0	0	0
Suppliers	0	0	0
Transportation/logistics providers	0	0	Ο

	0	10	20	30	40	50	60	70	80	90	100
Percentage of goods imported from outside U.S.											
Percentage of goods exported outside U.S.											

38. What percentage of customer deliveries are made by each of the following delivery methods? (total must equal 100%)

Company-owned vehicles	0
Common carriers	0
Contract carriers	0
Customer pickup	0
Other	0
Total	0

39. Which of the following criteria are used to monitor and evaluate suppliers? (select all that apply)

Product quality/number of non-conformances Accuracy of order/inbound perfect orders Lead times On-time delivery (trailer arrival date and time) Damaged goods in transit ASN documentation problems Barcode scanning issues Incorrect master data Productivity improvements Environmental performance Safety Labor practices

Financial stability				
Price reductions/adjustments				
Corporate governance				
Ethics				
Other				
None of the above				

Assets and Technology

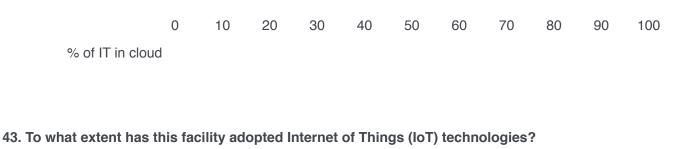
40. What percentage of the company's outbound vehicles are owned vs. leased?

	0	10	20	30	40	50	60	70	80	90	100
Percentage of company- owned vehicles											

41. What were the following investments as a percentage of annual sales in recent year (or of the annual value of shipments if this facility is a cost center)?

	0	10	20	30	40	50	60	70	80	90	100
Facility equipment (e.g., conveyors; excluding vehicles and robotics)											
Robotics and robotic technologies											
Offsite vehicle purchases (trucks, planes, rail cars, etc.)											
Offsite vehicle maintenance (trucks, planes, rail cars, etc.)											
Onsite vehicle purchases (e.g., tow motors, forklifts)											
Onsite vehicle maintenance (e.g., tow motors, forklifts)											

42. What percentage of the facility IT systems and applications are in the cloud?



Full application of IoT technologies throughout facility Significant application of IoT technologies in facility Some application of IoT technologies in facility No application of IoT technologies in facility, but planning for IoT No application of IoT technologies in facility, and not planning for IoT

44. To what extent are the following IT systems and applications in use in this facility?

	Currently in use	Plan to implement	No plans to implement
Warehouse management system (WMS)	0	0	0
Warehouse control system	Ο	0	0
Warehouse execution system (WES)	0	0	0
Business analytics/big data	0	0	0
Demand planning system	0	0	0
Electronic data interchange (EDI)	0	0	0
Radio frequency identification (RFID)	0	0	0
Automated storage and retrieval system	0	0	0

Transportation management system (TMS)	0	0	0
Real-time location system (RTLS)	0	0	0
Pick to light and put to light systems	0	0	0
Voice tasking	0	0	0
Labor management system	0	0	0
Mobile communications	0	0	0
Asset management system (e.g., CMMS)	0	0	0

Please provide the information below to receive a complimentary Executive Summary of study findings.

First and Last Name	
Title	
Company	
Email address	