



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): _____



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

- _____ Manufacturer
- _____ Consumer
- _____ Retailer
- _____ Wholesaler/distributor
- _____ Government/utilities/military
- _____ Other

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)
- _____ Full case picking
- _____ Partial pallet picking
- _____ Full pallet picking
- _____ Other

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
- _____ Storage
- _____ Shipping
- _____ Pick and pack
- _____ Other

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
- _____ Supervisor
- _____ Management/leadership
- _____ Maintenance staff
- _____ Support staff (e.g., information technology)
- _____ Transportation
- _____ Other

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

- _____ 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
- ☐ More than 40 hours



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

_____ Percentage of empowered/self-directed employees

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?

_____ Percentage of temporary staff

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

_____ 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

- _____ 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?

- _____ Warehouse labor
- _____ Transportation labor
- _____ Warehouse space
- _____ Sourced product

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?

- _____ 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.*

- _____ 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%)

- _____ 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suppliers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation/logistics providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37. What percentage of goods are received from and shipped outside the United States (by dollar volume)?

- _____ 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
- _____ Common carriers
- _____ Contract carriers
- _____ Customer pickup
- _____ Other

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?

_____ 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)?

- _____ 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)
- _____ Information technology systems and applications

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

_____ % of IT in cloud

43. To what extent has this facility adopted Internet of Things (IoT) technologies?

- ☐ 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)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warehouse control system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warehouse execution system (WES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business analytics/big data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demand planning system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic data interchange (EDI)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radio frequency identification (RFID)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automated storage and retrieval system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation management system (TMS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real-time location system (RTLS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pick to light and put to light systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voice tasking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labor management system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile communications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asset management system (e.g., CMMS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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