2022 Logistics Efficiency Indicator for Logistics Service Providers (LSP)

And a Look at the Last Mile Delivery Service (LMDS) Sector

Introduction

1. The Department of Trade and Industry (DTI) through its Supply Chain and Logistics Management Division (SCLMD) is tasked to monitor the Logistics Industry
2. The Logistics Observatory is one of the priority projects of DTI with the aim to develop an online portal and database of logistics-related information. In 2016, the DTI and Worldbank-IFC agreed to develop the Logistics Observatory in response to the recommendation of the National Logistics Masterplan (NLMP) and Philippines' commitment to the ASEAN Framework Agreement on Multimodal Transport (AFAMT).
3. DTI SCLMD in partnership with the World Bank conducted a survey with the Logistics Service Providers (LSPs) to measure the performance of the country's logistics sector and identify improvements.
4. In 2022, an update is to be made with a special look at **Last-Mile Delivery Service Providers**

Review of Previous Survey

Review of the 2017 LSP Survey Results

- Truck operators had the most long-term contractual relationship with LSPs. Thus, domestic trucking is the most outsourced logistics activity.
- **Food produce** (34%), **general cargo** (16%), and **electronics** (15%) are the main import commodities while electronics (40%), food (20%), and garments (20%) are the main exports handled by LSPs.
- Domestic flows mostly originate from Luzon with the Visayas as the main domestic destination. Luzon is also the main origin of exports going to the top three destinations, namely the United States, Japan, and China.

Review of the 2017 LSP Survey Results

- International ocean freight provides the highest level of revenue.
- **Cost** is the dominant logistics performance indicator; LSPs consider that the cost dimension needs to be more controlled than other dimensions (time and reliability) in order to achieve profits.
- Delays in customs processing is considered the most problematic issue for LSPs.
- The overall logistics performance is perceived as higher than the World Bank's LPI score and ranking.

2017 Domestic Logistics Index Philippines

Table 1: Domestic Logistics Index in the Philippines

	LPI 2016 (World Bank)	(LSP 2017 Survey data)
a) The quality of transport and telecommunications infrastructure	2.61	2.50
b) The quality of port infrastructure	2.55	2.64
c) The quality of airport infrastructure	2.55	2.70
d) The quality of road infrastructure	2.55	2.30
e) The availability of logistics infrastructure	2.55	3.18
f) The availability of domestic shipping services	2.55	3.27
g) The availability of reliable transport services	3.01	3.27
h) The quality of domestic shipping services	2.70	3.00
i) The Quality of logistics services and competence of service providers	2.70	3.73
j) Possibility to track and trace shipments	2.86	3.18
k) The probability of shipments arriving at the promised time	3.35	3.10
Average	**2.86**	**2.99**

` *The scale is from one to five with five being the highest score and reflecting the best-perceived performance.*

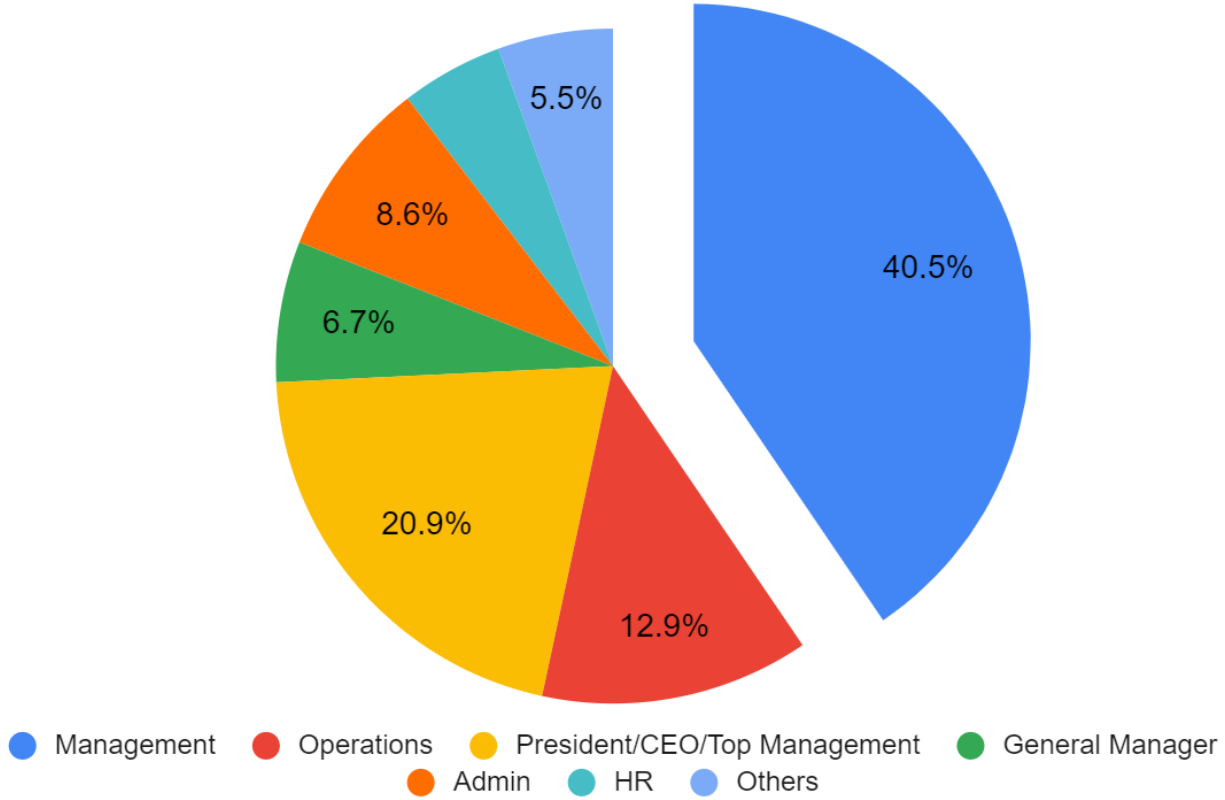
LEI 2022

2022 Logistics Efficiency Indicator Scope

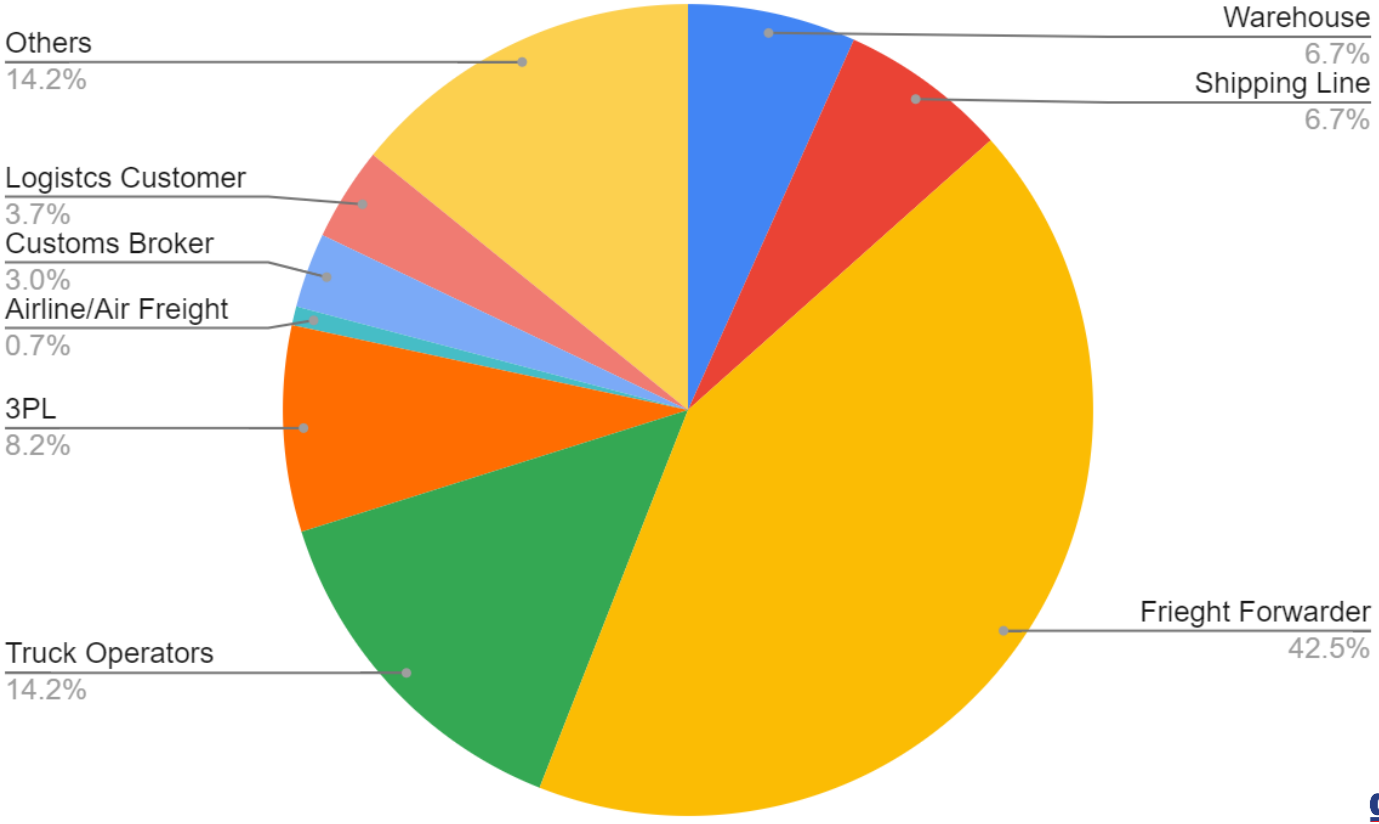
Improved dimension of survey respondents

1. Trucking Companies
2. Shipping Lines
3. Freight Forwarders
4. 3PL Companies
5. Customs Brokerages
6. Warehousing
7. Airlines
8. Last-Mile Delivery Service
9. End Users - Logistics Customers

Respondents' Position in Company



Respondents' Representation



Sectoral Breakdown Of Survey Results: *Performance*

Warehouse Operators

Performance Metrics of Warehousing Operators

Main Reasons cited for difficulties in completing deliveries

a. **Congestion**
b. Accidents
c. Delays in Receiving Cargo
d. Delays in Customs Process
e. Availability of Logistics services/coordination
f. Damage of cargo
g. TABS slots
h. **Covid related delays**

Shipping Operators

Performance Metrics of Shipping Operators

- **Arrival on time for shipping services appears problematic**
  a. Large majority of the surveyed companies were able to complete deliveries without delays
- **In transit damage of cargo does not appear to be an issue**
- **Main Reasons cited for difficulties in completing deliveries**
  a. **Congestion**
  b. Additional Costs
  c. Delays in Receiving Cargo
  d. Delays in Customs Process
  e. Inspection delays
  f. Availability of Logistics services/coordination
  g. Weather
  h. Note Special Problem: **Lack of Vessel Space at Transhipment**

Freight Forwarders

Commodity Profile of Freight Forwarding Operators

In terms of products moved by freight forwarders, the top products moved include

1. Electronics
2. Miscellaneous Manufactures
3. Transport Equipment
4. Plastics and Rubber
5. Fruits and Vegetables.

Observed transportation mode for inbound cargo for freight forwarders was mainly through **sea**, though some multimodal methods were noted by respondents, with the primary outbound transport mode used being sea shipping.

ORIGIN and DESTINATION Profile of Freight Forwarding Operators

International

Main Import Markets: South Korea, China, USA, Singapore, Japan, Indonesia, Hong Kong, Thailand, Malaysia

Main Export Markets: Singapore, USA, China, Thailand, Malaysia, Indonesia, Hong Kong, Japan, Taiwan, United Kingdom

Domestic

- Manila To Cebu
- Manila To Cagayan de Oro
- Manila To Davao and General Santos

Performance Metrics of Freight Forwarding Operators

Average Lead Time (in Days) to Fulfill an Order	
Land	4 Days
Sea Domestic	8 Days
Air Domestic	3 Days
Sea International	15 Days
Air International	5 Days
Intermodal (RORO)	9 Days

**international sea freight lead times reflective of issues currently experienced in the market due to covid delays*

Average Number of Shipments Per Customer	
Land	2x a week
Sea Domestic	1x a week
Air Domestic	6x a week
Sea International	2x a week
Air International	2x a week
Intermodal (RORO)	1x a week

Performance Metrics of Freight Forwarding Operators

- 1 out of 5 Freight forwarders cite delays to shipment more than 75% of the time.
- Main Reasons cited for difficulties in completing deliveries
  a. Congestion (80% of respondents)
  b. Delays in Customs Process (80% of respondents)
  c. Availability of Tabs (60%)
  d. Covid related delays
  e. Inspection delays
  f. Special note: delays also from carrier payment process

Truckers

Performance Metrics of Trucking Operators

Average Lead Time (in Days) to Fulfill an Order	
Land	2 Days
Intermodal (RORO)	9 Days

Average Number of Shipments Per Customer	
Land	Daily
Intermodal (RORO)	2x a week

Performance Metrics of Trucking Operators

- **30%** of deliveries are delayed
- Damaged cargo is an issue for 15% of respondents
- Main Reasons cited for difficulties in completing deliveries
  a. **Truck Ban** / Coding (85%)
  b. Delays in receiving cargo (54%)
  c. Traffic Enforcers (46%)
  d. Note - **TABS** booking cited 23% of the time

3PL Service Providers

Performance Metrics of 3PL Operators

Average Lead Time (in Days) to Fulfill an Order	
Land	4 Days
Sea Domestic	12 Days
Air Domestic	2 Days
Sea International	37 Days
Air International	7 Days
Intermodal (RORO)	6 Days

Average Number of Shipments Per Customer	
Land	5x a week
Sea Domestic	4x a week
Air Domestic	2x a week
Sea International	1x a week
Air International	4x a week
Intermodal (RORO)	1x a week

Performance Metrics of 3PL Operators

- Main Reasons cited for difficulties in completing deliveries
  a. **Congestion (80% of respondents)**
  b. **Covid related delays (80% of respondents)**
  c. **Weather and Availability of Logistics Services (60%)**
  d. Delays in receiving Cargo
  e. Additional Costs
  f. Inspection Delays
  g. Checkpoints
  h. TABS

Survey Results:

3 Dimension Assessment

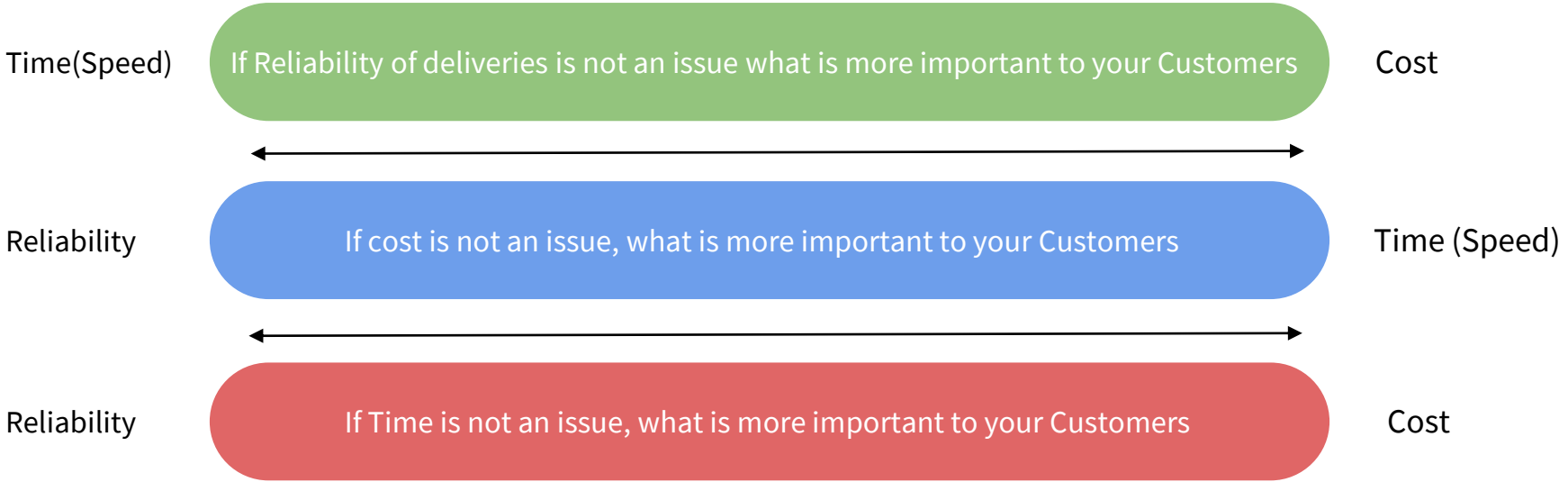
Cost - Time - Reliability

Performance through 3 dimensions

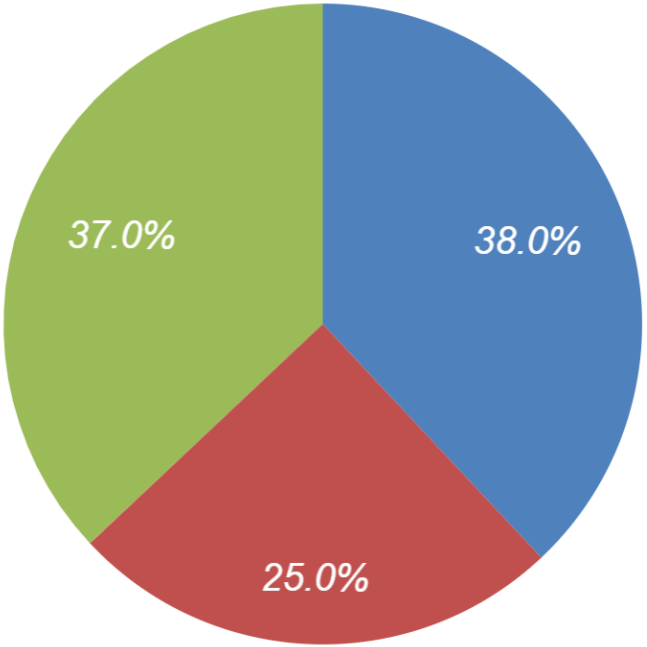
The measurement of logistics performance can be looked at through three dimensions

1. **Cost** - how much one needs to pay for a delivery of the shipment to be made
2. **Reliability** (On-Time delivery) - the reliability by which one can expect that a shipment can be made. If a supplier quotes a 2-day delivery time, they should be able to complete that delivery within 2 days without delays
3. **Time** (Speed) - how quickly a delivery can be made

Performance through 3 dimensions

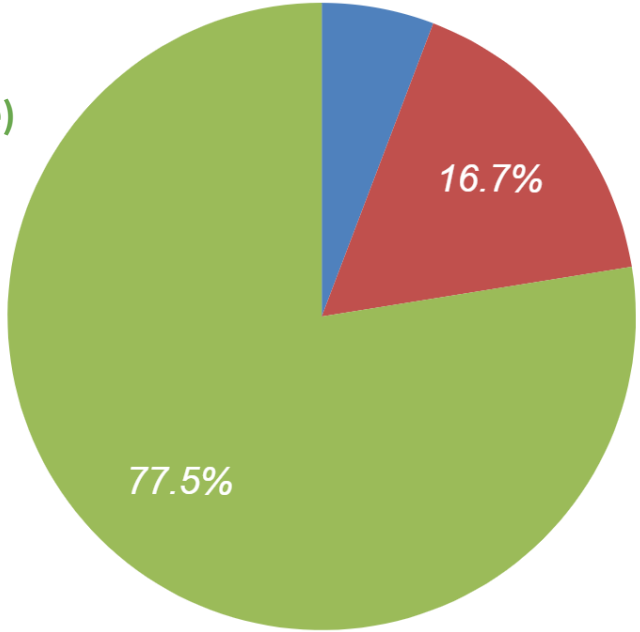


Performance through 3 dimensions
2017 vs 2022



2017

Cost
Time (Speed)
Reliability (On-Time)



2022

Lead Time Performance vis-a-vis Customer Expectations

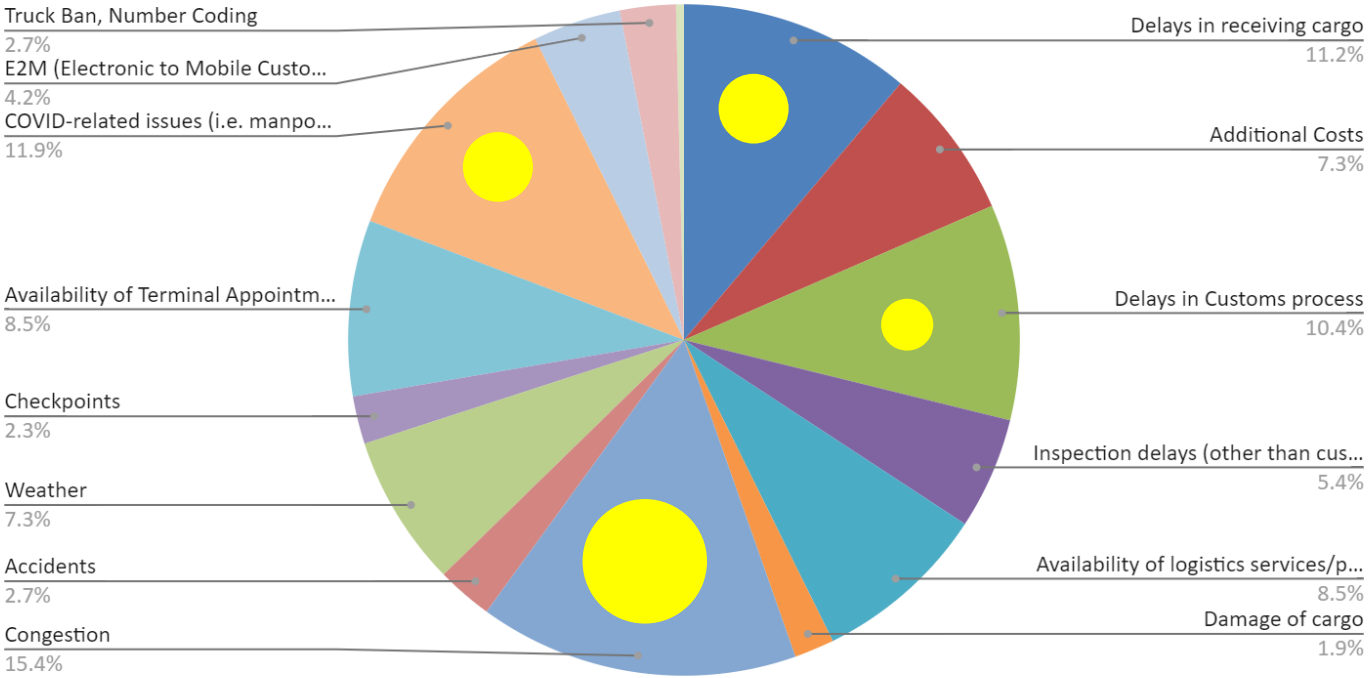
KPIs (days)	Min	Mean	Max	Clients
Average No of Days Lead Time				
Land	2	4	11	5
Sea Domestic	7	8.5	14	14
Sea International	5	19	60	60
Air Domestic	2	2	3	2
Air International	2	5	7	5
Intermodal	5	7	9	7

Reliability performance KPI 2017 to 2022

KPIs (%)	Min	Mean	Max
Delivery In Full On Time (DIFOT) 2017	52.50%	85.12%	100.00%
Delivery In Full On Time (DIFOT) 2022	54.17%	69.23%	100.00%

** Previous LEI Highlighted that because of the Low minimum value for this KPI that Reliability was indeed an issue*

Most common causes of problems affecting performance



Survey Results:

Index Scores

Domestic Logistics Performance Index

Based on your perception, Rank the performance of domestic logistics in the Philippines

Domestic Logistics Perception Index

Domestic Logistics	Philippines LPI 2016 (World Bank)	Score/ (LSP 2017 Survey data)	Philippines LPI 2018 (World Bank)	Score/5 (LEI 2022 Survey data)
a) The quality of transport and telecommunications infrastructure	2.61	2.50	2.73	3.06
b) The quality of port infrastructure	2.55	2.64	2.73	3.17
c) The quality of airport infrastructure	2.55	2.70	2.73	3.28
d) The quality of road infrastructure	2.55	2.30	2.73	3.00
f) The availability of domestic shipping services	2.55	3.27	3.29	3.15
g) The availability of reliable transport services	3.01	3.27	3.29	3.48
i) The Quality of logistics services and competence of service providers	2.70	3.73	2.78	3.52
j) Possibility to track and trace shipments	2.86	3.18	3.06	3.28
k) The probability of shipments arriving at the promised time	3.35	3.10	2.96	3.24
Average	**2.86**	**2.99**	**2.90**	3.24

International Logistics Performance Index

Based on your perception, Rank the performance of international logistics in the Philippines

International Logistics Perception Index

International logistics	Philippines LPI 2016 (World Bank)	Score/5 (LSP 2017 Survey data)	Philippines LPI 2018 (World Bank)	Score/5 (LEI 2022 Survey data)
a) The effectiveness of Customs and other authorities in customs services	2.61	3.09	2.53	3.04
b) The quality of transport and telecommunications infrastructure	2.55	2.58	2.73	3.07
c) The quality of port infrastructure	2.55	3.23	2.73	3.07
d) The quality of airport infrastructure	2.55	3.00	2.73	3.31
e) The quality of road infrastructure	2.55	2.69	2.73	2.91
f) The availability of logistics infrastructure (i.e. warehouse, distribution centers, etc.)	2.55	3.38	2.73	3.48
g) The availability of reliable transport services	3.01	3.46	3.29	3.30
h) The quality of logistics services and competence of service providers	2.70	3.85	2.78	3.63
i) Possibility to track and trace shipments	2.86	3.62	3.06	3.41
j) The probability of shipments arriving at the promised time	3.35	3.42	2.98	3.04
Average	**2.86**	**3.23**	**2.90**	**3.23**

LEI to LPI Comparisons

Country	Year	LPI Score	LPI Rank
Philippines	2022	3.24	**Based on LEI Survey*
Philippines	2018	2.69	65
Germany	2018	4.20	1
Singapore	2018	4.00	7
China	2018	3.61	26
Thailand	2018	3.41	32
Vietnam	2018	3.27	39
Malaysia	2018	3.22	41
Indonesia	2018	3.15	46

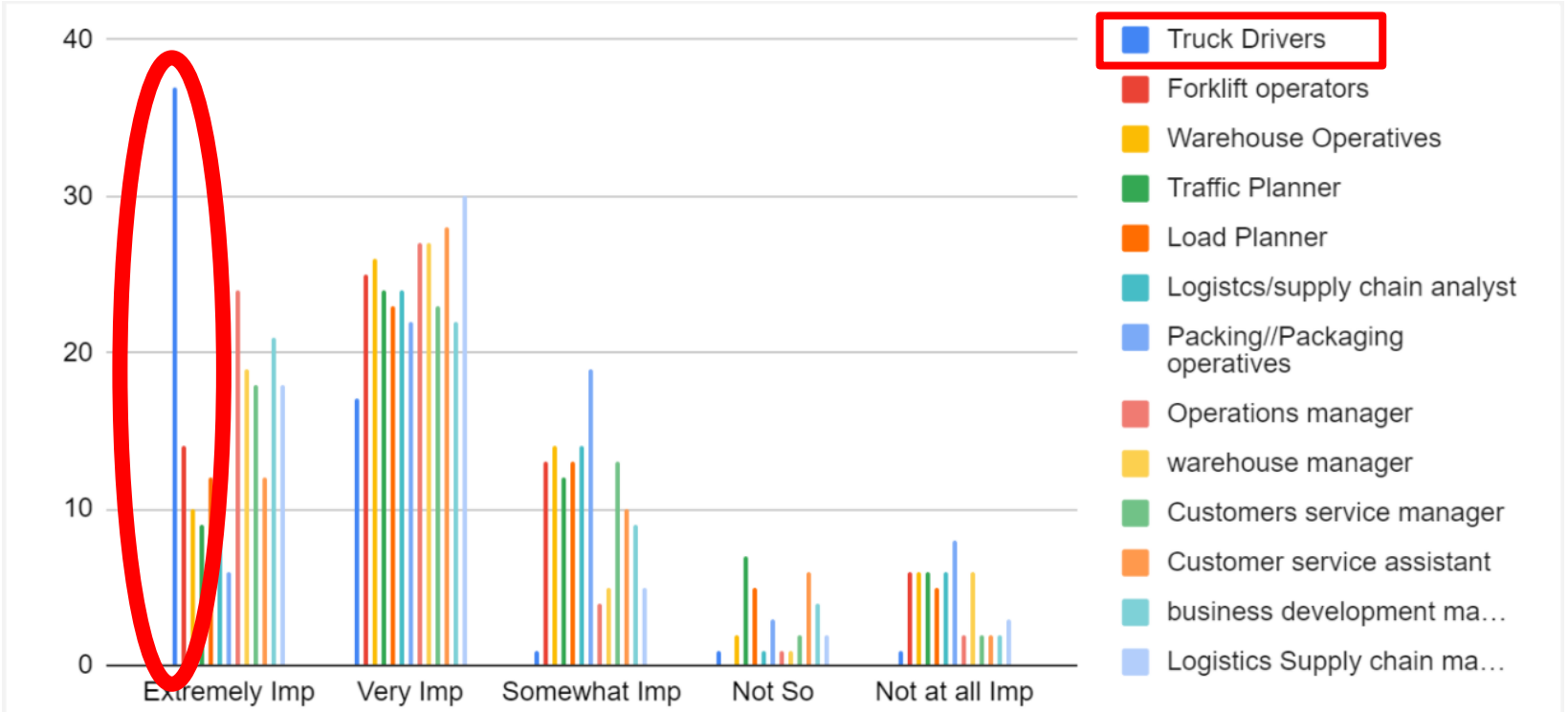
LEI to LPI Comparisons

Country	Year	LPI Score	LPI Rank
Philippines	2022	3.24	*Based on LEI Survey
Philippines	2018	2.69	65
Germany	2018	4.20	1
Singapore	2018	4.00	7
China	2018	3.61	26
Thailand	2018	3.41	32
Vietnam	2018	3.27	39
Malaysia	2018	3.22	41
Indonesia	2018	3.15	46

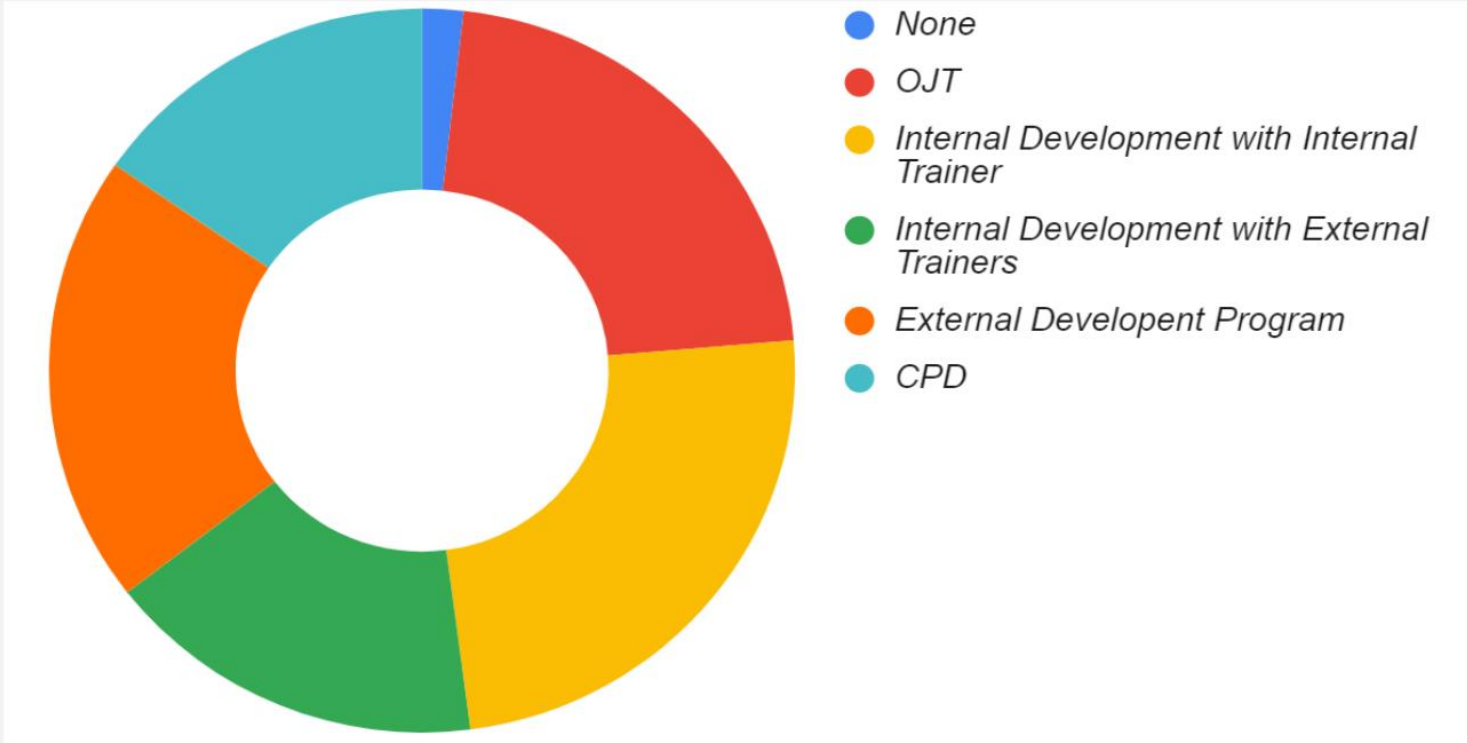
Survey Results:

Human Resource Issues

Importance of Skilled Logistics Labor

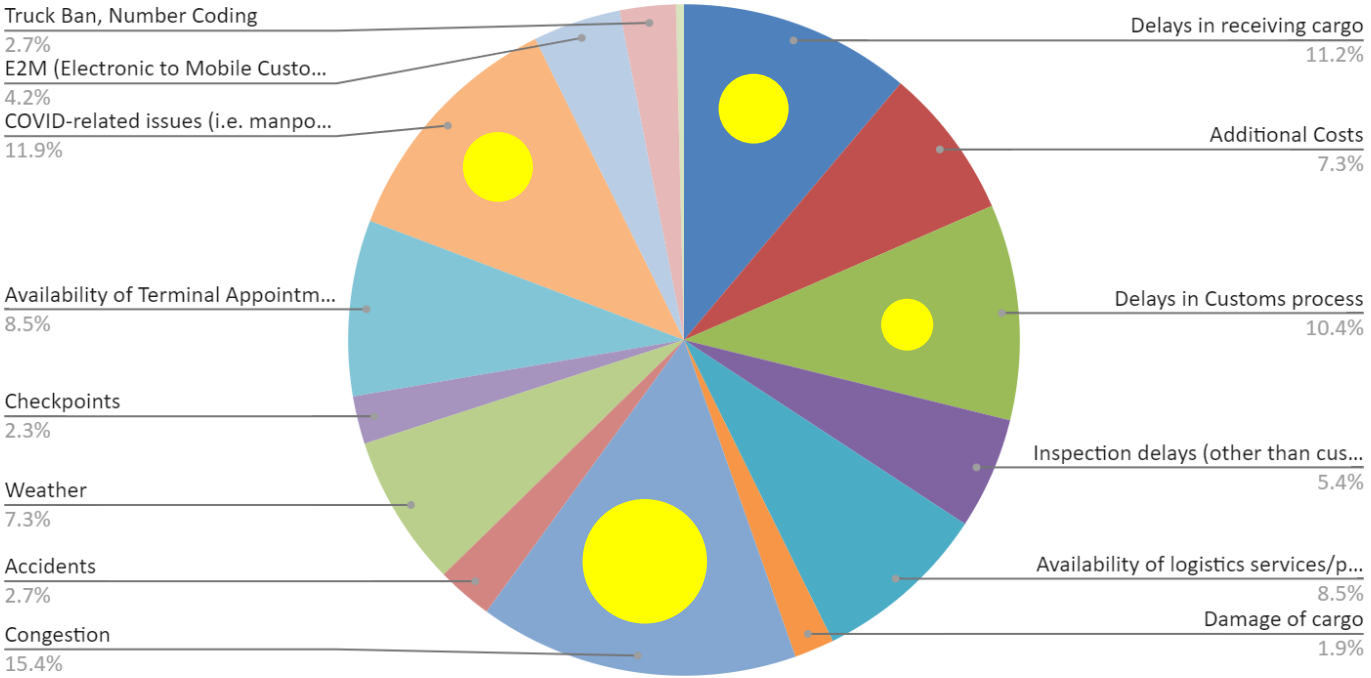


Staff Development Practices



Major Recommendations

Most common causes of problems affecting performance



Most common causes of problems affecting performance

1. Congestion
2. Covid Related Issues
3. Delays in Receiving Cargo
4. Delays in Customs Processes

Survey Results:

Major Issues Highlighted

Major issues Highlighted

1. Terminal Appointment Booking System (TABS)
2. Truck Ban
3. LGU Pass-Through Permits/Stickers
4. Shipping Charges and Rates
    a. Container Deposit
    b. Terminal Handling Charges
5. Modernizing and Digitizing the Bureau of Customs - information dissemination

Other issues Highlighted

1. Conflicting regulatory and development powers of the Philippine Ports Authority
2. A move to have MICT and Manila South Harbor under one customs zone
3. **Have discussions with major grocery stores and regulate the receiving window time of all goods both for trade and key accounts. Expand the operations until night to cater to nighttime delivery of goods in the Greater Manila Area to avoid congestion of major thoroughfares.**
4. Inclusion of Goods movement in **Philippine National Railway** as a way to reduce the cost of transport, given the high cost of fuel.
5. Government policies alignment to improve the ease of business, and efficiency of logistics operations.
6. Government to consider to own / manage / provide bonded facilities for temporary storage/transloading.

Survey Results:

Recommendations

Recommendations

Policy:

1. A whole of society approach to the problem of **congestion**. While a revisit to the current truck ban should be made together with the current calls for a review by the MMDA on the color-coding scheme, it may be warranted to look at a whole society solution to the problem of congestion, specifically
    a. Strengthen night time deliveries to eliminate bulk deliveries that take up precious road capacity during the daytime
    b. Review of the costs/benefits to the private sector as it is understood that nighttime deliveries will entail a cost (i.e. overtime pay)
    c. Review of TABS, as it does not assist in decreasing congestion
2. Consultative review on other possible solutions to pass-through fee problems
3. Shipping charges review and decoupling of THC
4. BOC to increase its efforts in information dissemination (implementation of the CMTA 2016)

Infrastructure:

1. A look at the use of **Rail for cargo** vis-a-vis the current Rail development plans of DOTR

Last Mile Delivery Service Providers

Situational Analysis

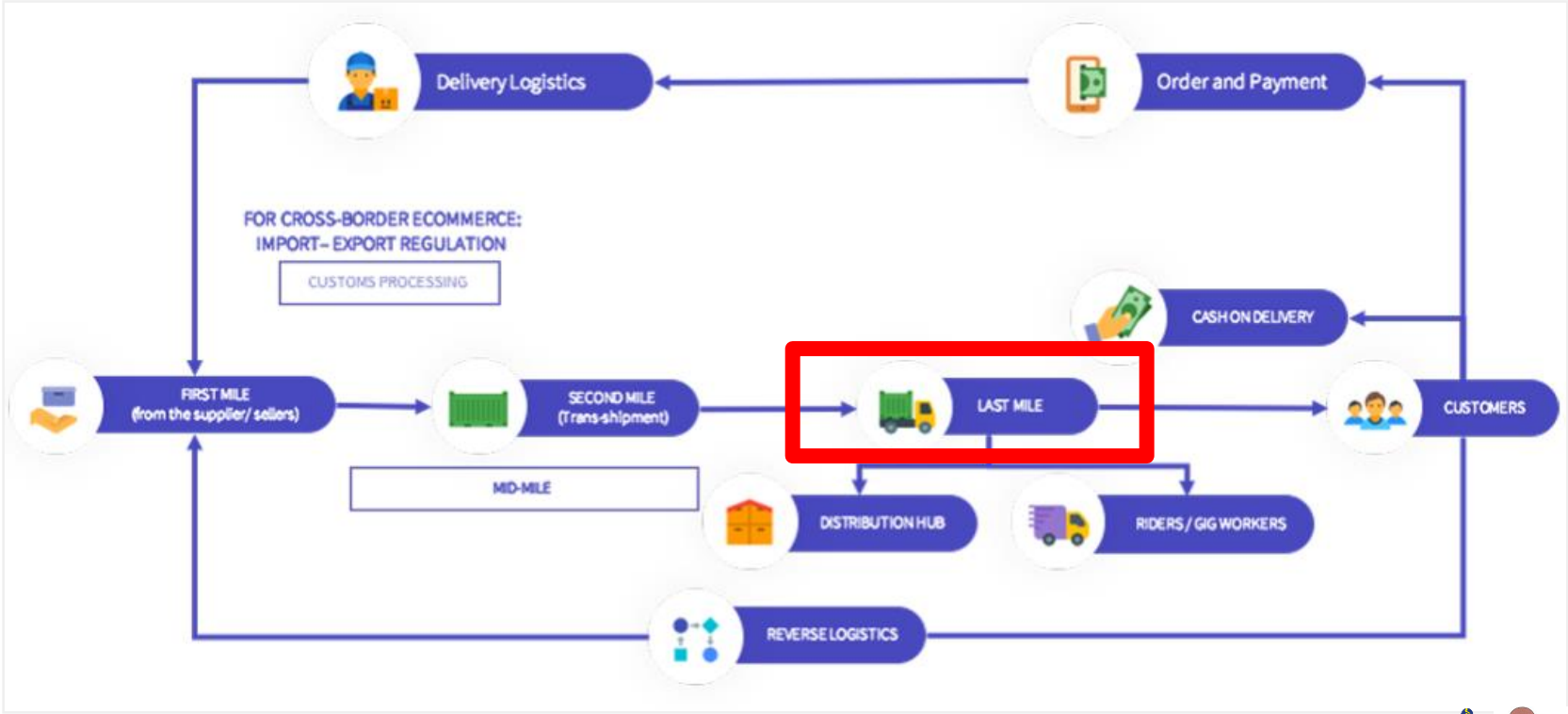
Situational Analysis

- COVID-19 has accelerated the use of E-Commerce Platforms
  - E-Commerce Market 2019: USD 3 Billion
  - E-Commerce Market 2021: USD 12 Billion (**4x growth**)
  - E-Commerce Market 2025: USD 26 Billion*

- Lockdowns accelerated the use of other means to deliver goods
  - This growth in E-Commerce also accelerated the demand of Last Mile Delivery Service Providers (LMDSP)

* e-Conomy SEA 2021. Google, Temasek, and Bain & Co.

Role of Last Mile in E-Commerce



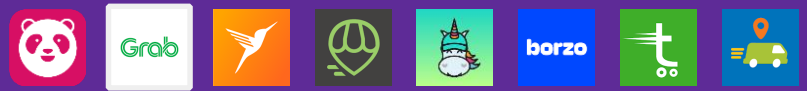
SOURCE: E-Commerce Philippines 2022 Roadmap

Last Mile Delivery Service Providers

Types

Last-mile delivery firms can be categorized based on the timeframe they can deliver products from supplier to the consumer

1. On Demand / Same Day



2. Scheduled / Conventional

UPPAF dti

Last Mile Delivery Service Providers

Regulatory Environment

Regulatory Environment

- **No Specific legal framework**
- All freight forwarding firms, whether international freight forwarders, domestic freight forwarders, and non-vessel operating common carriers (NVOCC), are covered under the regulation and are required to secure a license and certificate of registration from DTI.
- Department of Information and Communication Technology (DICT) regulates courier and messengerial services through Department of Transport and Communications (DOTC) Department Circular No. 2001-01, which was later fully adopted by DICT with the issuance of Department Order No. 2017-01. (Private Express and Messengerial Delivery Services - PEMEDES)

Last Mile Delivery Service Providers

Market Conditions

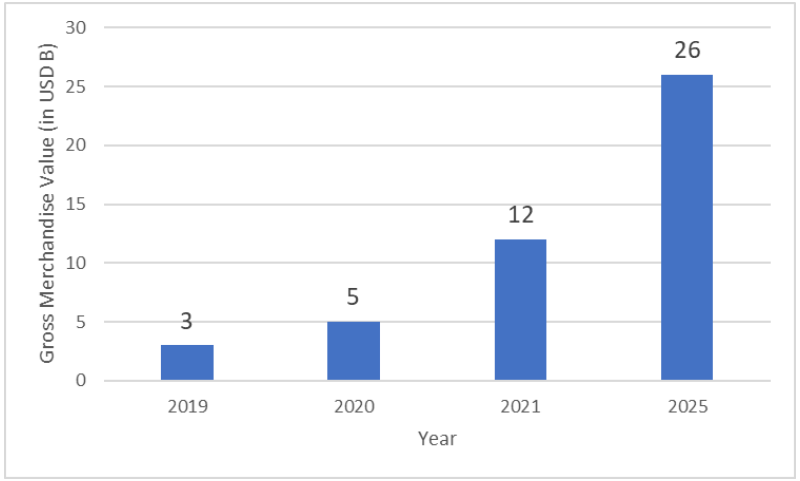
Supply

1. DICT through PEMEDES - 109 Listed Companies
2. DTI-Fair Trade and Enforcement Bureau
    a. 833 Freight Forwarders
        i. 273 are domestic freight forwarders
3. Digital Platforms

**OECD estimates there are around 50 to 70 courier companies operating without DICT License*

Demand

E-Commerce Growth in the Philippines



Source: e-Conomy SEA 2021

1. Philippine i**nternet economy** reached USD 17B in 2021. Out of the 17B, e-Commerce accounted for 12B in terms gross merchandise value (GMV)
2. e-Commerce GMV increased by **400%** from 2019 to 2021.
3. 2021 market size of USD 12B, expected at USD 26B by 2025.

Last Mile Delivery Service Providers

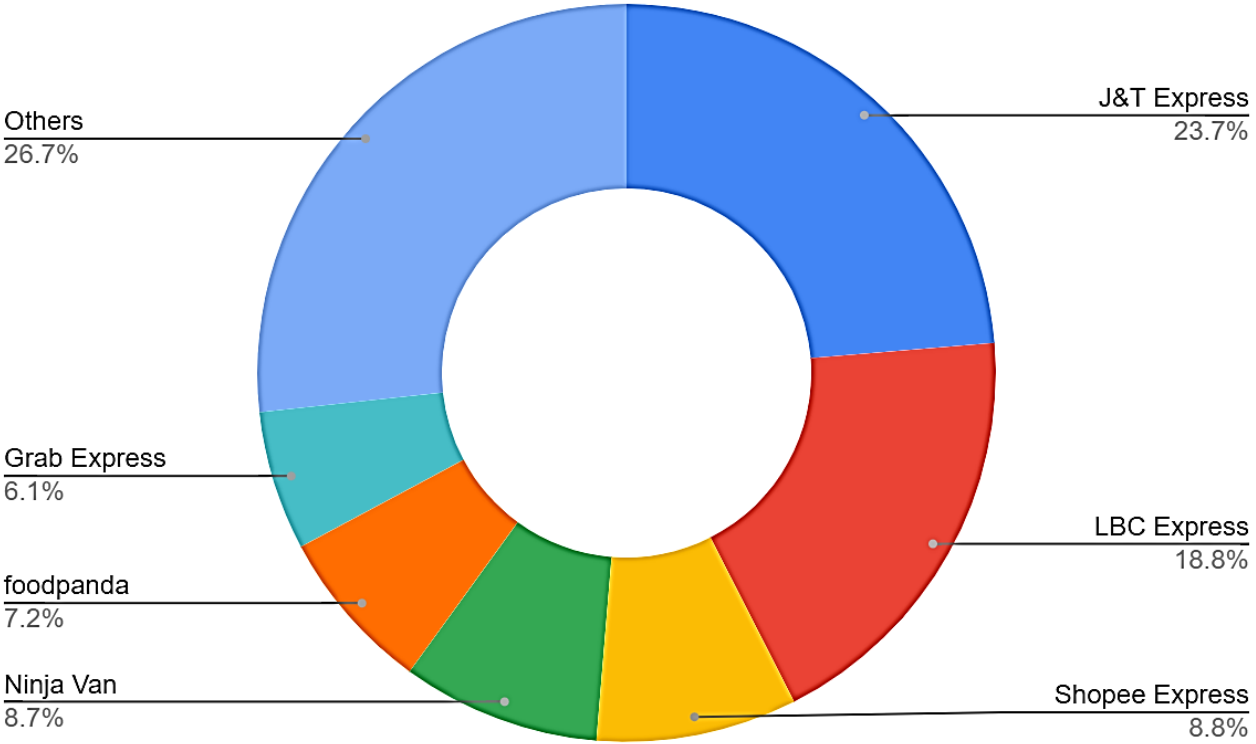
Competition

Php 58.24 B

Estimated Revenue Generation by the Last Mile Delivery Service Provider Sector for 2020*

**PEMEDES List with Nationwide Network*

Market Share based on Revenue



Source: LEI 2022 Survey, as culled from financial statements sourced from the Securities and Exchange Commission

Top Revenue Generating Companies from New Players

Catering mostly to last mile delivery. Top players already account for 73% of the market.

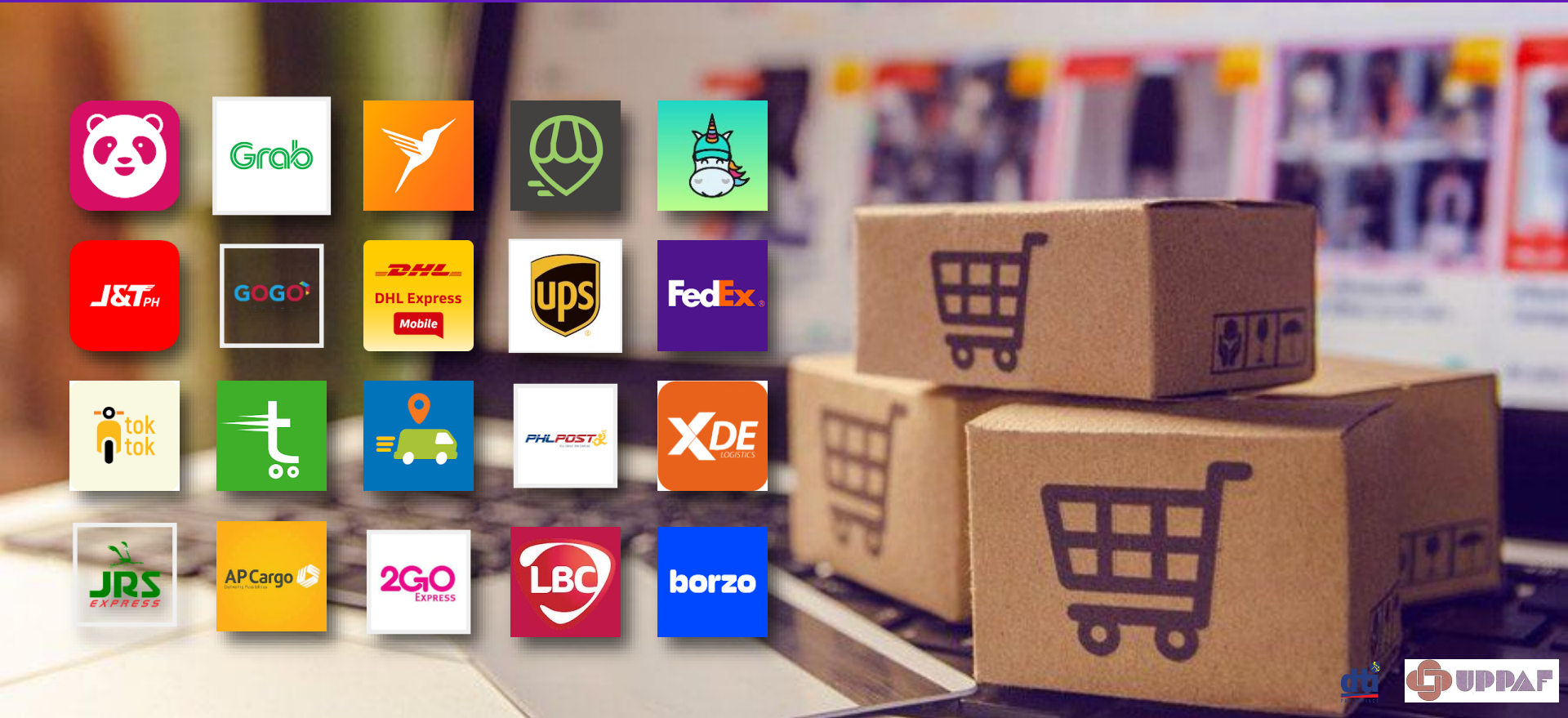
1. J&T Express
2. Lazada Philippines
3. Shopee Philippines
4. Ninja Van
5. foodpanda
6. Grab Express

COVID pandemic was good for some players

Especially for those catering to e-commerce

Rank based on Market Share	Company	Revenue Growth % (2019-2020)	Market Share % based on Revenue (2020)
1	J&T Express	543%	23.7%
3	Shopee Express	1,168%	8.8%
5	foodpanda	563%	7.2%
6	Grab Express	259%	6.1%
11	Entrego Express	14,877%	3.2%
12	Ximex Delivery Express	10%	2.6%
16	TokTok	34,589%	0.4%

Competition is Healthy

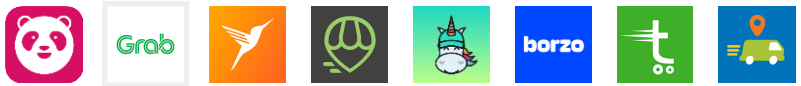


Last Mile Delivery Service Providers

Pricing

Pricing is varied

- Depends on service type, business model, vehicle mode and destination
- Pricing for On-Demand is competitive for both motorcycle and 4 wheel service, with multiple options available to end users.
  - On demand has facilitated the growth of MSMEs
  - But even larger scale sellers have tied up with Last Mile Providers
  - On demand has also become the norm for food and grocery deliveries
  - Pricing Strategies vary, with some services prioritizing shorter distance deliveries



Pricing is varied

- Scheduled delivery services vary, and are generally positively correlate distance and volume with price.
- Pricing is similar across services, though there are some outliers providing cheaper services compared to competitors

Case Study Direct Interviews

First, Mid and Last Mile Costs

3 Companies

3 different experiences

Company 1

FMCG Company

Imports from China

Cost from China to Warehouse in Philippines: **P10.6/Kg**

Items sold in Philippines through various e-commerce platforms and social media channels

Last Mile Delivery approximately **P16.40/Kg**

Company 2

Construction Supply Company

Imports from China

Cost from China to Warehouse in Philippines: **P9.65/Kg**

Items sold in Philippines through various e-commerce platforms

Last Mile Delivery approximately **P20/Kg**

Company 3

Food Franchise Company

Goods sold through two established e-commerce platforms

Last-mile delivery to customers (including platform fee) is **23.6%** of the cost of goods sold

SWOT

Strengths, Weaknesses, Opportunities and Threats

SWOT Analysis

STRENGTHS	WEAKNESSES
• Growing market for LMDSP • Large customer base • Consumption based economy • High demand for last mile delivery services	• LGU vs. National Government Requirements are not harmonized • Need to enhance public and private **coordination** • Enhance safety and protection for e-commerce firms, LMDSP, and delivery riders • Need for **skills development** for delivery riders
OPPORTUNITIES	**THREATS**
• Improving internet penetration • Expansion to secondary and tertiary cities • Expansion of digital payments and cashless transactions	• Unpredictability of permitting and licensing • Threat of New Entrants (issuance of Revised Public Service Act) - more foreign digital platforms and service providers.

Recommendations

Last Mile Delivery Service Providers

Recommendations

Policy

- **Inventory of all regulatory processes** pertinent to LMDS for streamlining
- Government to Establish an **E-Commerce Bureau under the Department of Trade and Industry**
- Pursue Legislations that Provide **Protection to Consumers**, Merchants, Ancillary Services, and **Riders** engaged in E-Commerce.
- Formation of Last-Mile Delivery Service Provider Association

Ease of Doing Business

- **Promote Investments for Last-Mile Delivery Service** in Secondary and Tertiary Cities
- **Harmonize permits and Licenses**; **Coordination with the Department of the Interior and Local Government (DILG) and Local Government Units**
- Promotion of digital payments and **cashless transactions**

Training

- **Skills Development Program** for Motorcycle Delivery Riders (Gig Economy, Customer Relationship, etc.) - The Institute of Labor Studies of DOLE also highlights the need to do the same.

End