

Changing home-based shopping patterns are leading a new urban freight movement in the Seoul Metropolitan Area

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- ❖ **Mission:** Develop solutions for urban freight problems that are collaborative and integrative with larger sustainability goals
- ❖ **Strategy:** four large metro areas (“mega-cities”)
 - Los Angeles, New York, Paris, Seoul regions
- ❖ **Consortium Members**
 - METRANS Transportation Center
 - University Transportation Research Center
 - French Institute of Sciences and Technology in Transport, Development and Networks (IFSTTAR)
 - Korea Transport Institute (KOTI)
 - Korea Ministry of Land, Infrastructure and Transportation
 - Seoul Institute, Gyeonggi Institute
 - Inha University
 - CJ Logistics, Lotte Global Logis

Online shopping prospers

- mobile shopping sales growing fast



SSG.COM

Online Shopping

Payment

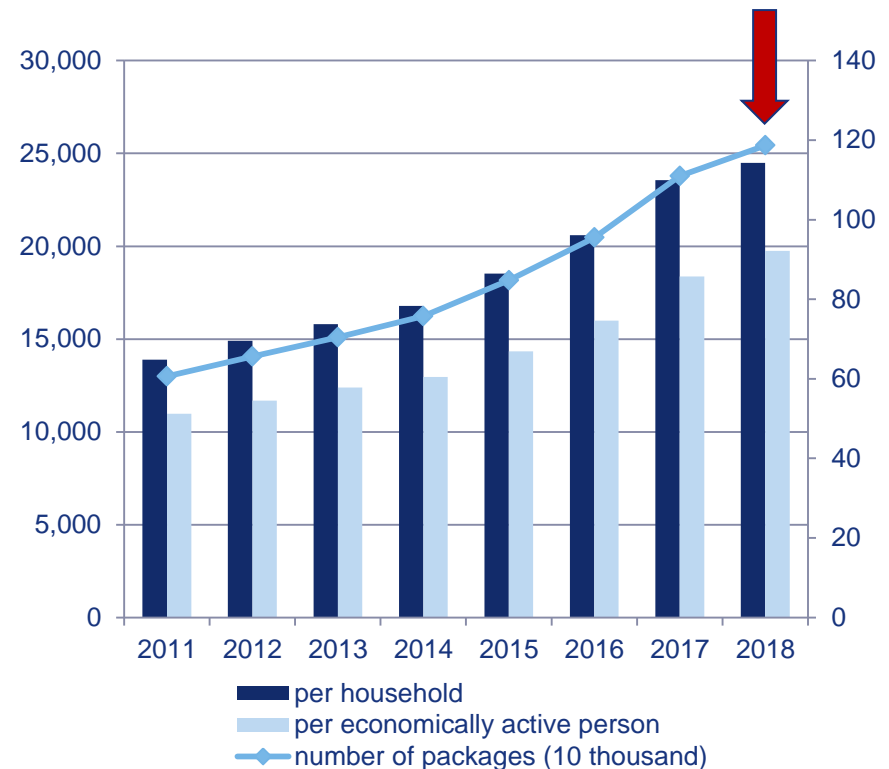
Delivery

▲ retail/finance/logistics integrated (eg. Shinsegae)

Parcel Delivery Service (2018)

- Revenues: \$5.67 billion (8.7%↑ from 2017)
- 2.5 billion packages
- 114.3 packages per household
- 92.2 packages per economically active person

(unit: 10 thousand packages) (unit: packages)



Data Source: KOILA

during the last one week of mine

5 Boxes

목요일 10/10 도착 완료

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월요일 10/14 도착 완료

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수요일 10/16 도착 완료

 동원참치 라이트스탠다드 + 쿡담 용기, 150g, 7개 [주문상세보기 >](#)

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금요일 10/11 도착 완료

 [신세계TV쇼핑](셀프전씨) 레이저 썬스크린 100 50ml 1+1 [주문상세보기 >](#)

 택배사 CJ 대한통운 1588-1255
송장번호 354293852382 **1 box**

GS SHOP

11번가

CJ 대한통운

SSG.COM

Gmarket

한진택배

CJmall

coupang

롯데글로벌로지스

Hmall

TMON

LOGEN
로젠택배

NSmall

위메프

KOREA POST 우체국택배

롯데홈쇼핑

⋮

e-Commerce and Delivery in Korea

- ❖ growing online shopping = increasing packages delivered
- ❖ development of parcel delivery services in Korea
- ❖ \$ 72.8 billion of online sales, 2.5 billion packages in 2018



Data Source: KOSIS, KOILA

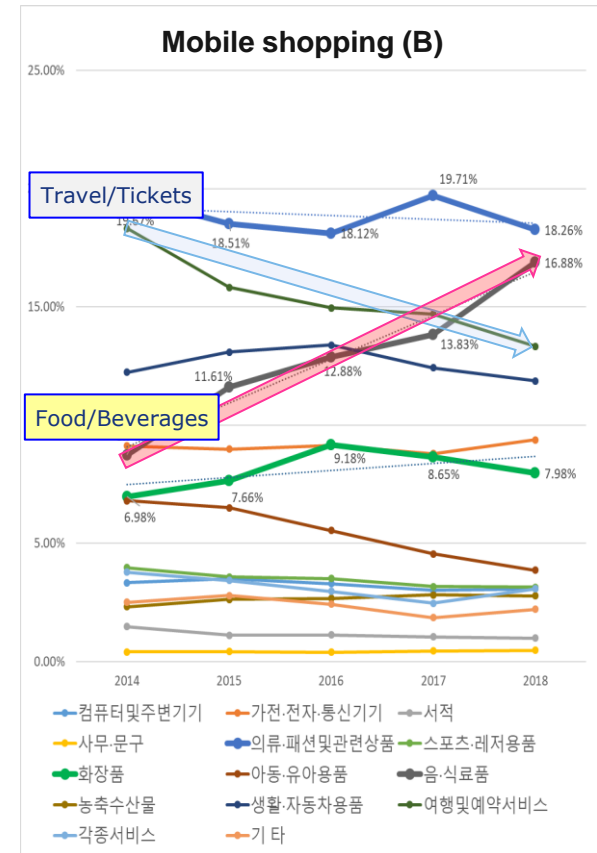
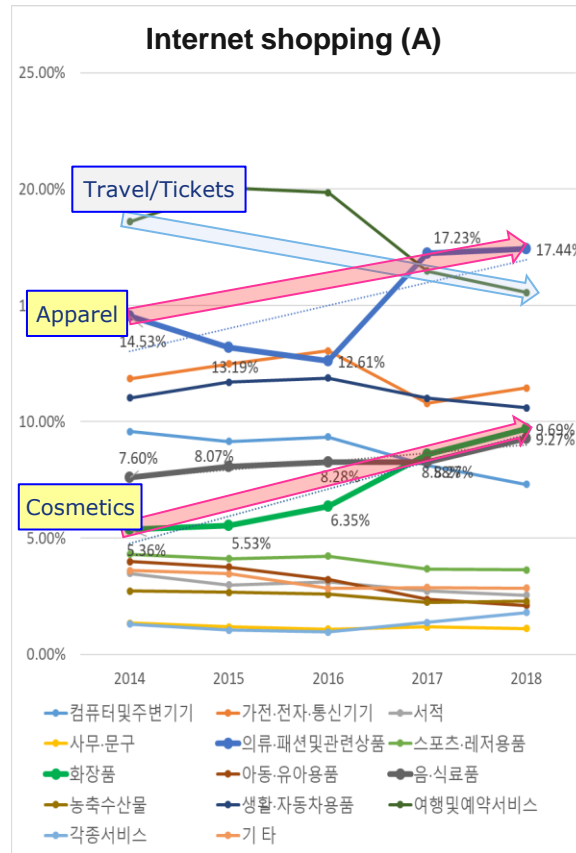
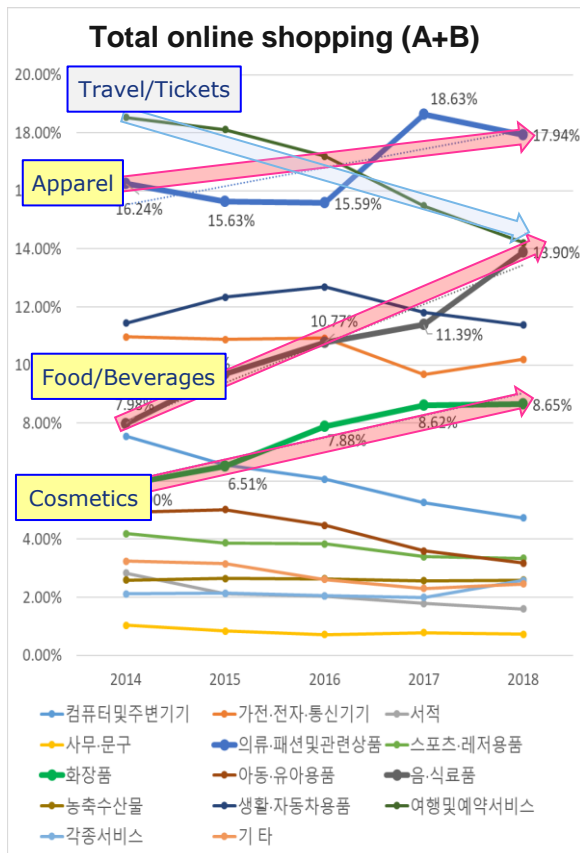
- ❖ Increase rates of online shopping sales and # of parcels delivered
- ❖ a sharp increase of online purchases of household goods
 - ☞ partly thanks to **coupang** 로켓배송 introduced in 2014?



Data Source: KOSIS, KOILA

Change in items consumed online

- ❖ Increase in food and beverages, cosmetics, apparel and fashion products, and any other household goods
- ❖ However, decrease in the portion of travel and any other ticket reservation services online shopping since 2014

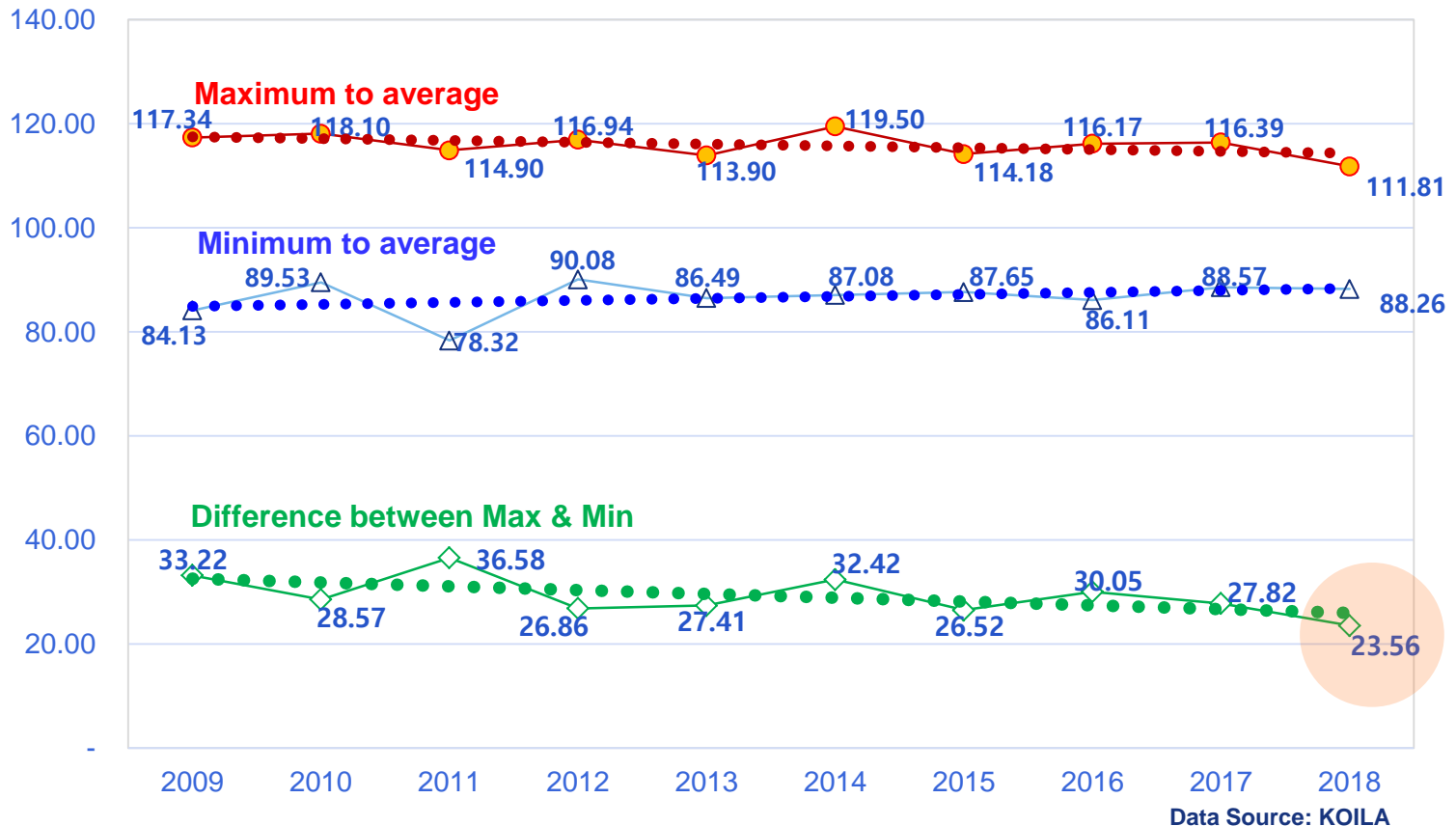


Data Source: KOSIS

New delivery strategies needed

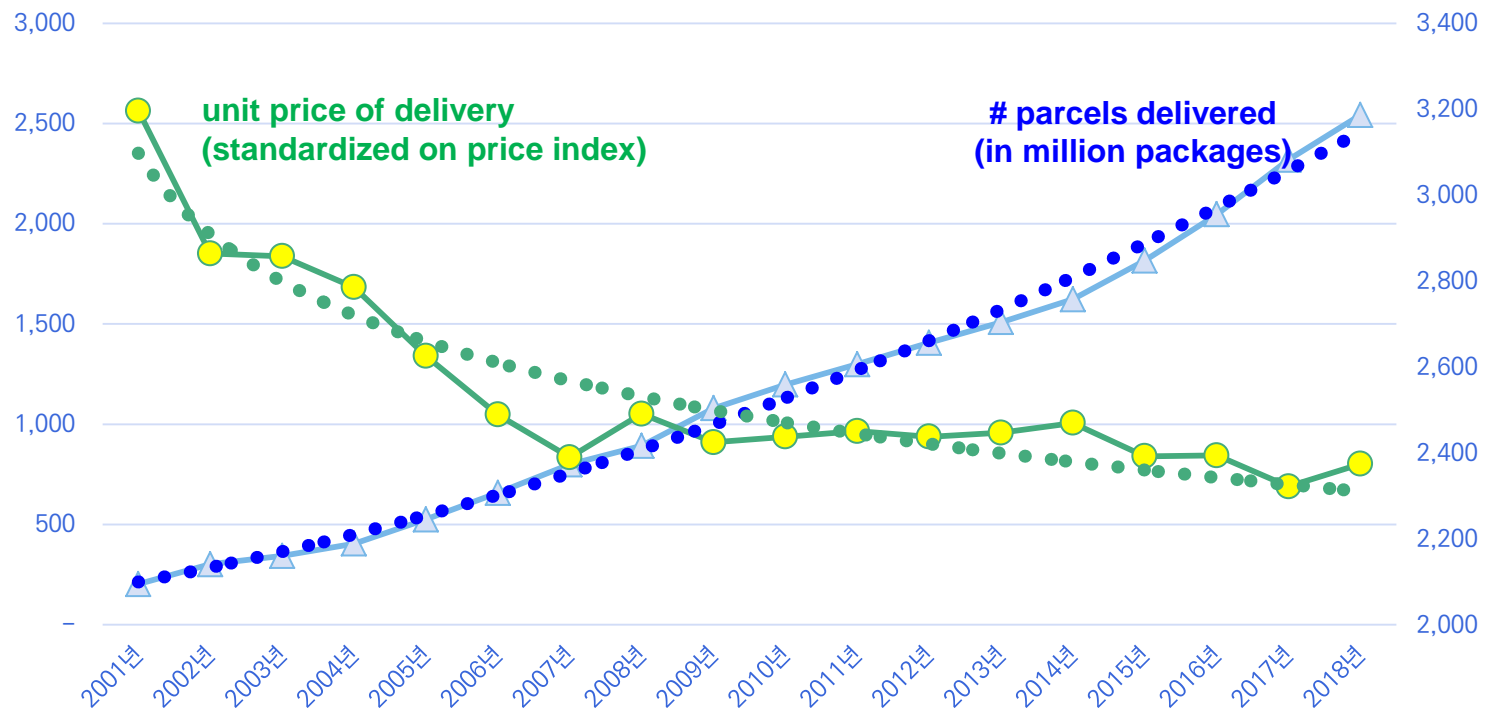
- ❖ In the past, seasonal fluctuations in parcel delivery volume observed, but now its fluctuation getting smaller while total volume increasing
 - seems attributable to items sold online (more daily necessary goods)
 - implying parcel carriers to expand their investment to the assets

Monthly volatility in the volume of parcels



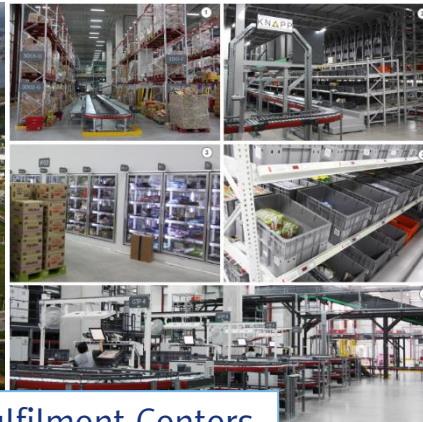
- ❖ Challenges : more intense competition & dropping delivery prices
- ❖ “Saving transportation costs” is the key
- ❖ Major parcel carriers restructuring their network strategies
 - From Single-Hub to **Multi-Hub**
 - Especially **more in the Seoul Metropolitan Area**

Volume of parcels and unit price of delivery



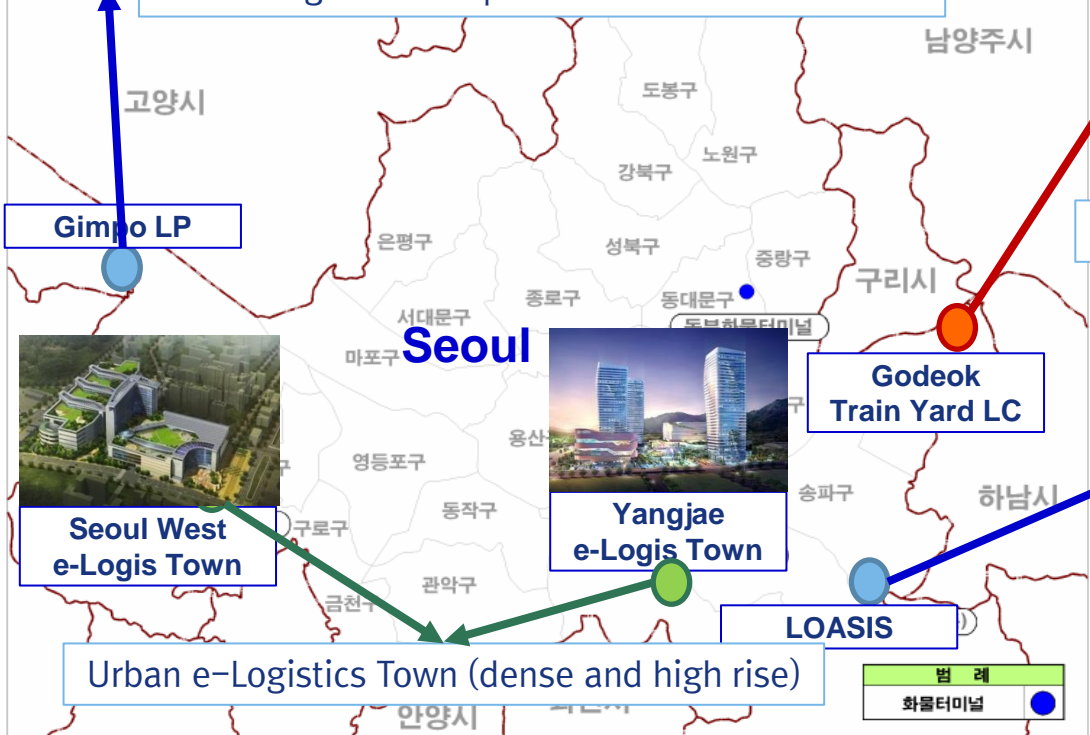
Data Source: KOILA

❖ New development of logistics facilities in the city of Seoul



Urban Logistics Complex with Fulfilment Centers

Logistics Center developed on the idle space of Seoul Metro Train Yard



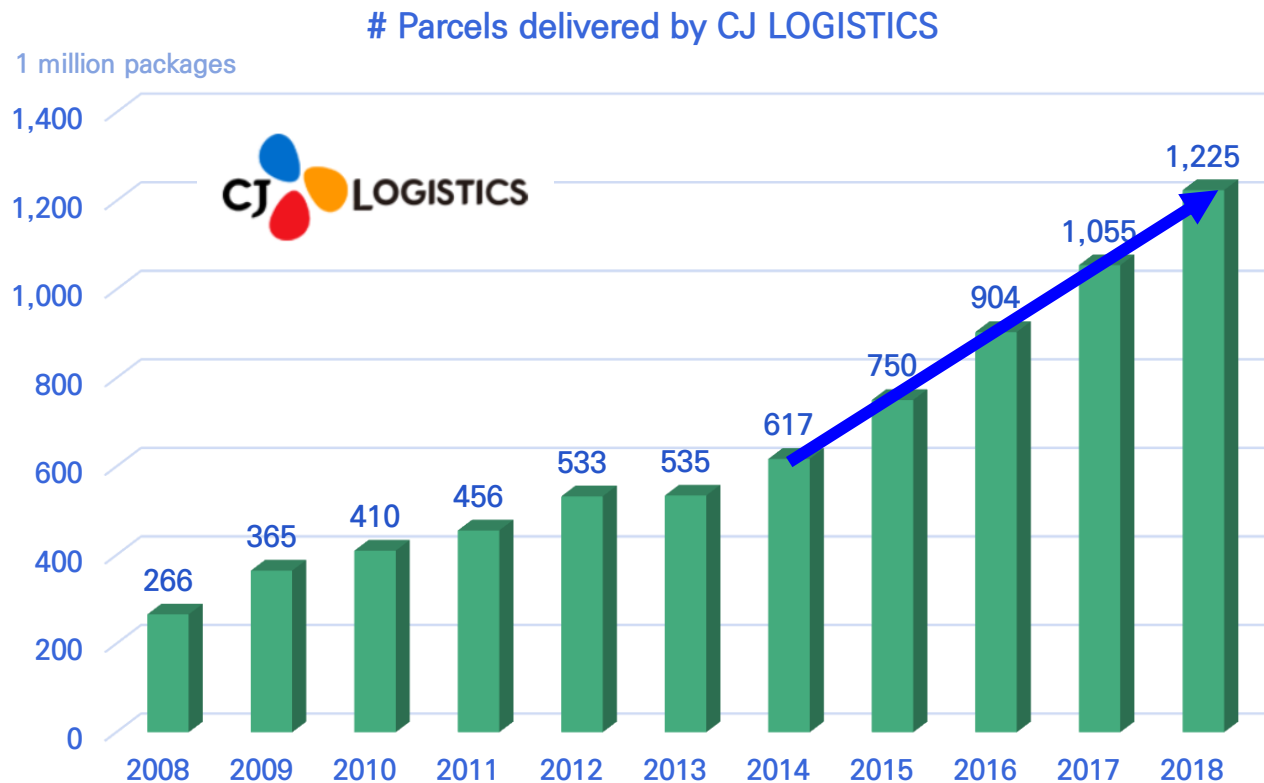
Urban Logistics Complex with Fulfilment Centers



Urban e-Logistics Town (dense and high rise)

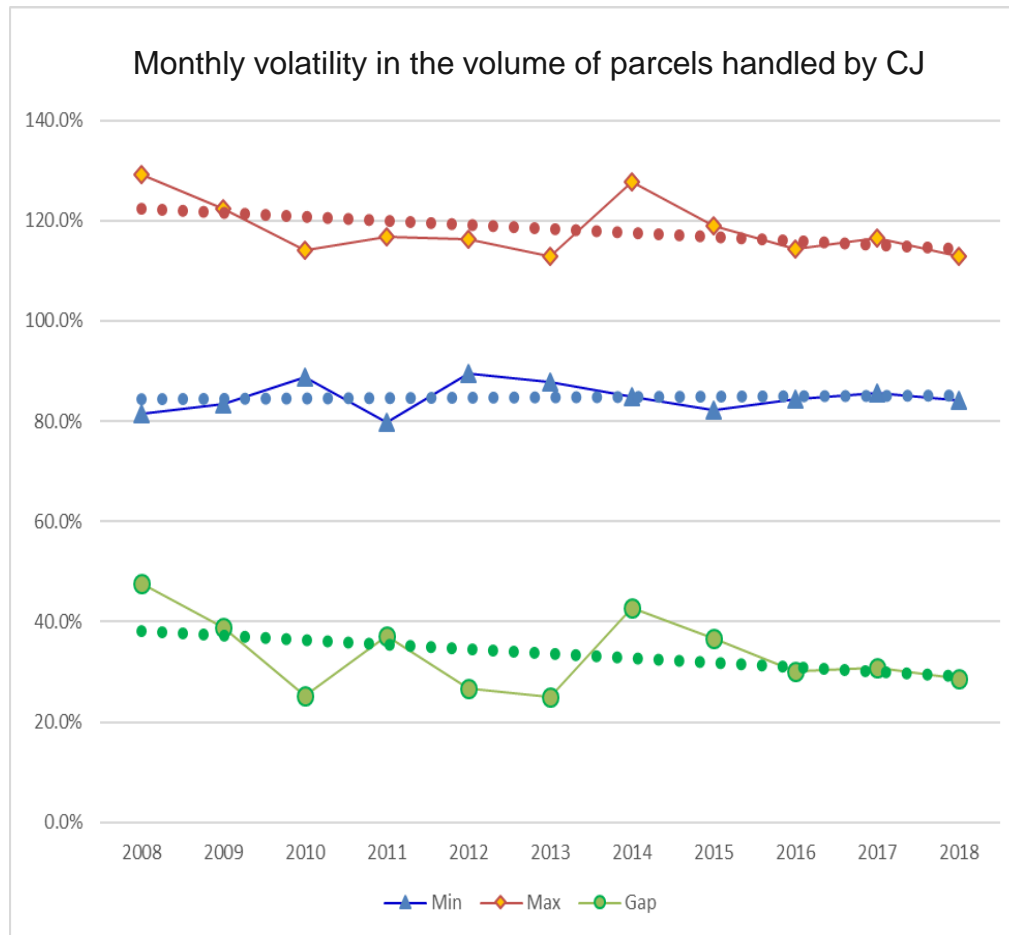
❖ CJ LOGISTICS

- Ranked as the 1st parcel carrier in Korea, 48.2% of market share
- 1.23 billion a year, max 6.67 million packages a day in 2018
- ✓ grown almost fivefold during the last 10 years (0.27 packages in 2008)
- ✓ sharply growing since 2014



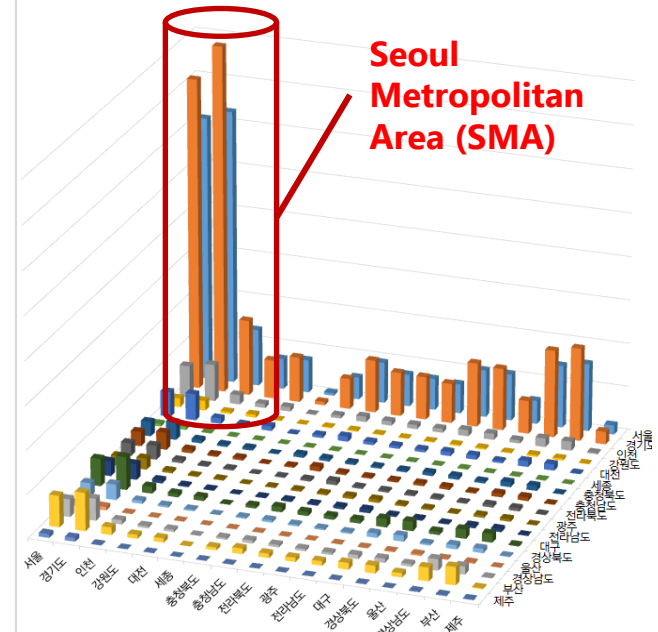
Data Source: CJ LOGISTICS, KOILA

- Monthly volatility in parcel volume has been dropping: around 40% → 30%
- Majority of services needs in the Seoul Metropolitan Area (SMA)



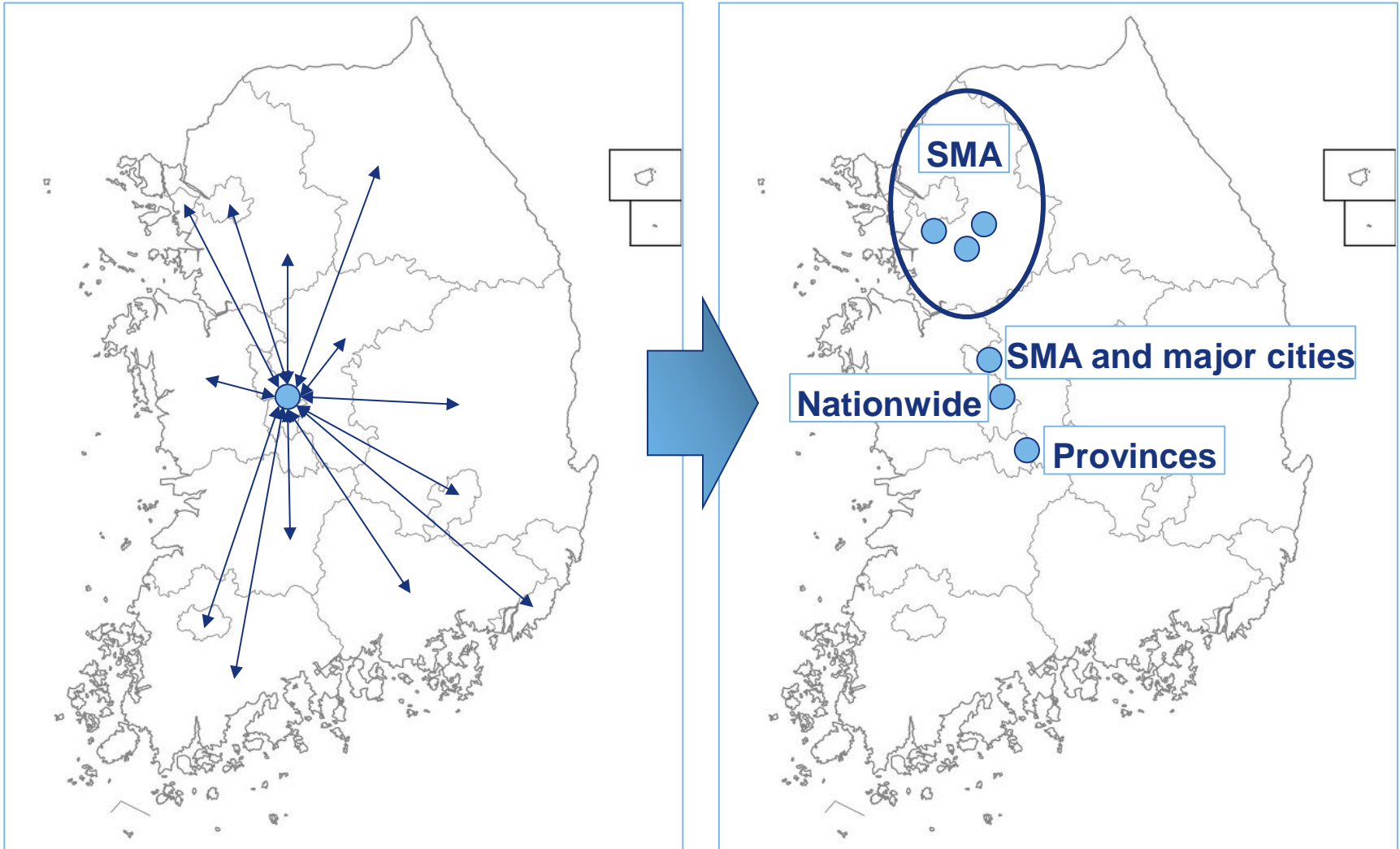
Population

- 25.7 mil in SMA; 49.7% (9.7 mil in city of Seoul)
- * Area : 11.3% of country
- 51.7 mil total in Korea



Data Source: CJ LOGISTICS, KOILA

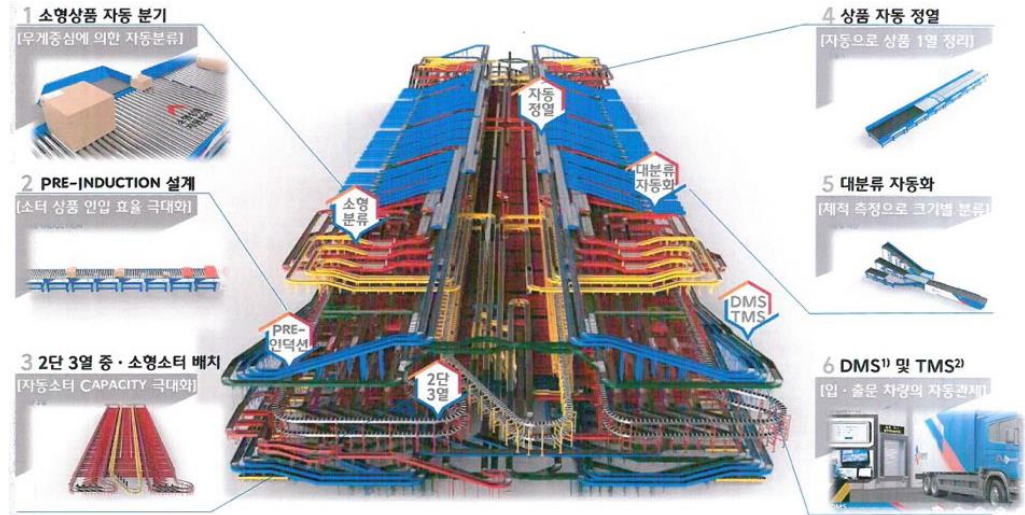
❖ New freight transportation network strategy with **multiple hubs**



Data Source: CJ LOGISTICS

Hubs in the SMA : example of a brand new hub

<Seoul Metropolitan Area>



CJ Logistics Gonjiam Mega-Hub

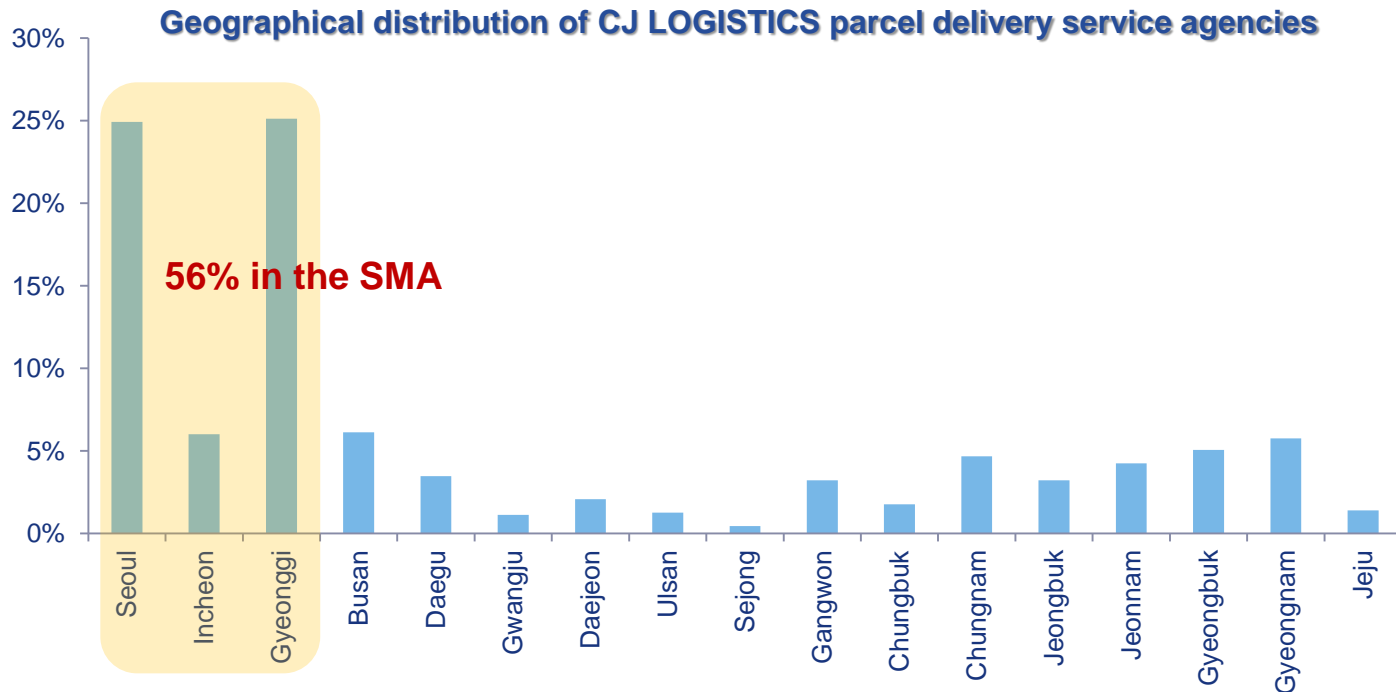
구분	내용
대지 위치	경기도 광주 초월읍 신월리 794번지 일원
Land area	104,328 sq. m
Construction area	62,535 sq. m
건폐율	59.94% (법정:60%)
Total area	296,098 sq. m
용적율	140.14% (법정: 180%)

6-story bldg : 2 under-, 4 above-ground
1.72 million boxes handled within 12 hrs

주차대수	터미널동 (간선)	795 대	
	보안동 (일반차량)	295 대	
	옥외	임시대기	44 대
		대형버스	26 대
	일반차량	76 대	

1,236 vehicles can be accommodated

- ❖ keep trying to guarantee a **high-density service area**
 - 6 Hub-Terminals
 - 7 Local Hub-Terminals (including 4 Consolidation Hubs)
 - 280 Sub-Terminals
 - 1,800 Agencies and 26,000 Handling Stores
 - 18,000+ couriers for last-mile delivery



Data Source: CJ LOGISTICS, KOILA

- ❖ collaboration between public and private sectors
 - location
 - consolidation
- ❖ new types of division of labor
 - new transportation modes
 - crowdsourcing
- ❖ more actively technology applied

KOTI enriches the future by securing harmony
among humans, the environment and transport.

감사합니다
Thank you

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