

MF-IFSTTAR Seminar
Local and Global Urban
Logistics
October 16, 2018
Paris, France



Parcel deliveries in Seoul Metropolitan Area

2018. 10. 16

Jee-Sun LEE

jeeslee@koti.re.kr

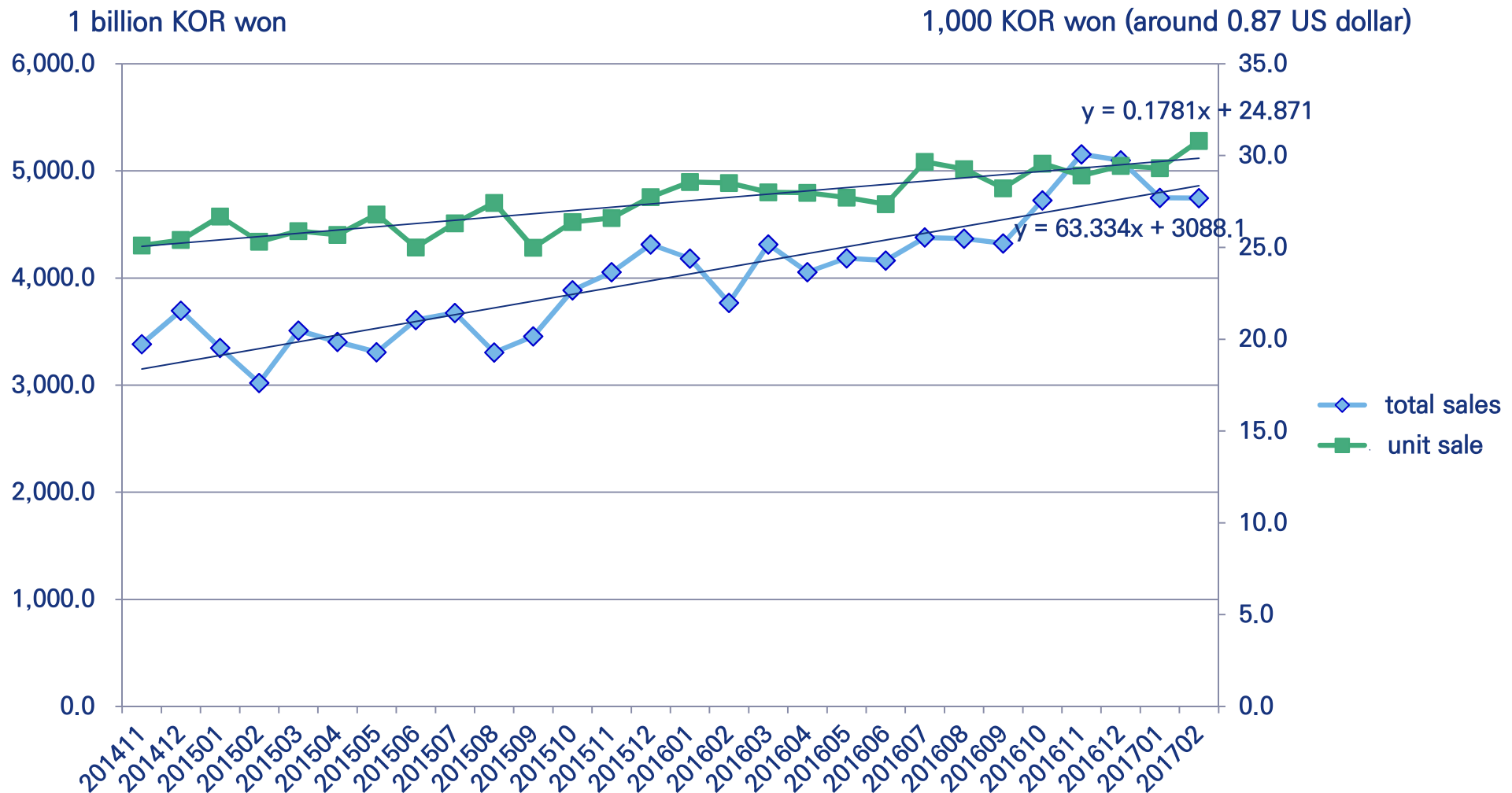
MetroFreight Center of Excellence Seoul

Dept. of Logistics Research, The Korea Transport Institute (KOTI)

Commerce Trends Changing in Korea

❖ eCommerce sales, any sales for services excluded, keep growing

- total sales : \$30 billion → \$42 billion
- sales per transaction : \$22 → \$27

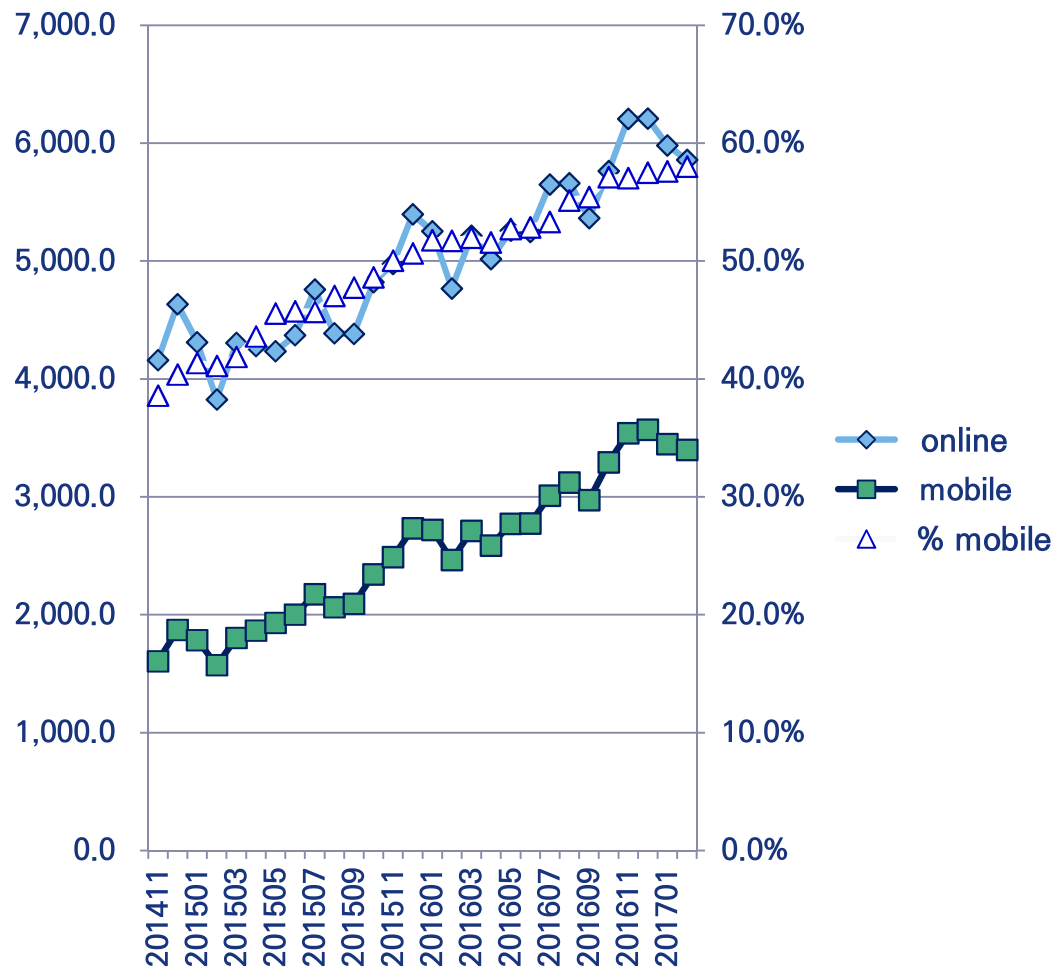


Data source : KOSIS (2014.12~2017.3) and KOILA's parcel delivery service DB for the same period

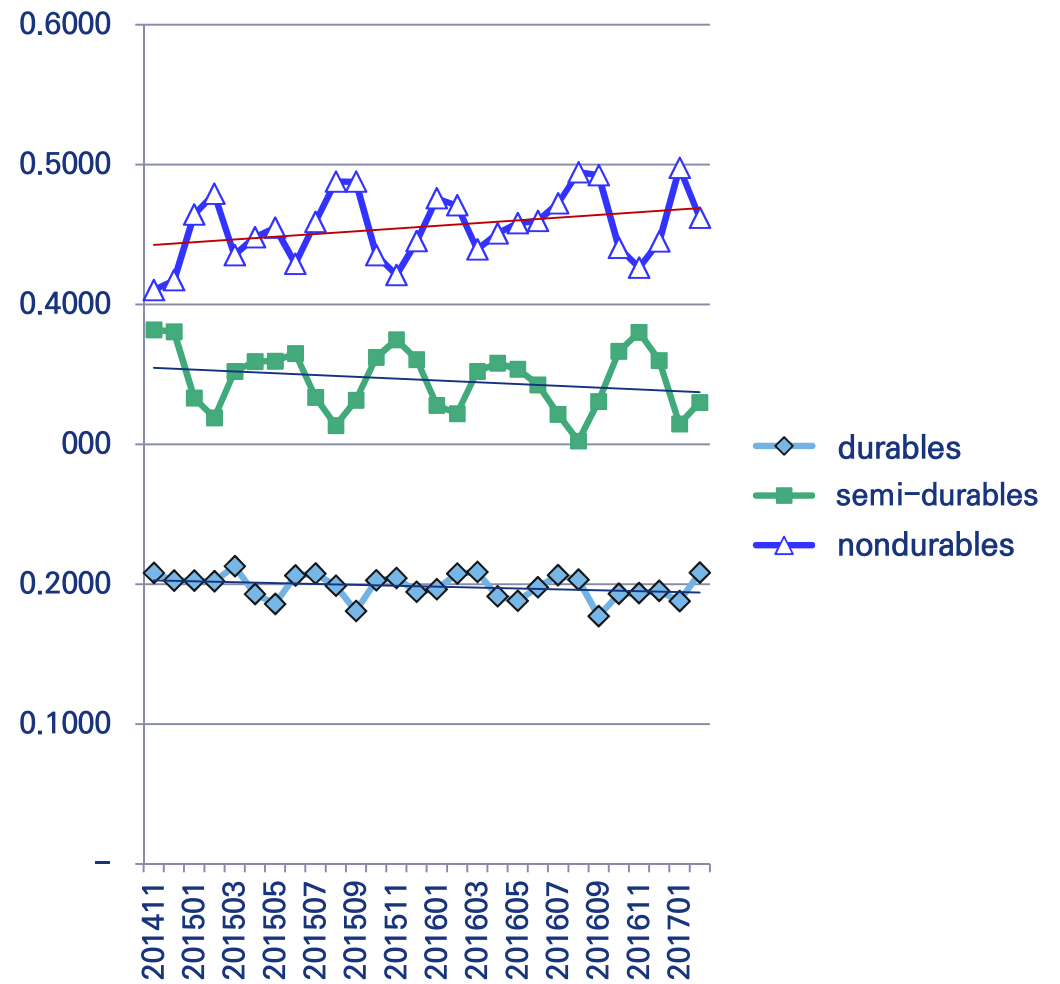
Korean Commerce Trends Changing

- ❖ mobile shopping sales growing fast
- ❖ sales of nondurable goods relatively increasing

1 billion KOR won



Data source : KOSIS (2014.12~2017.3)

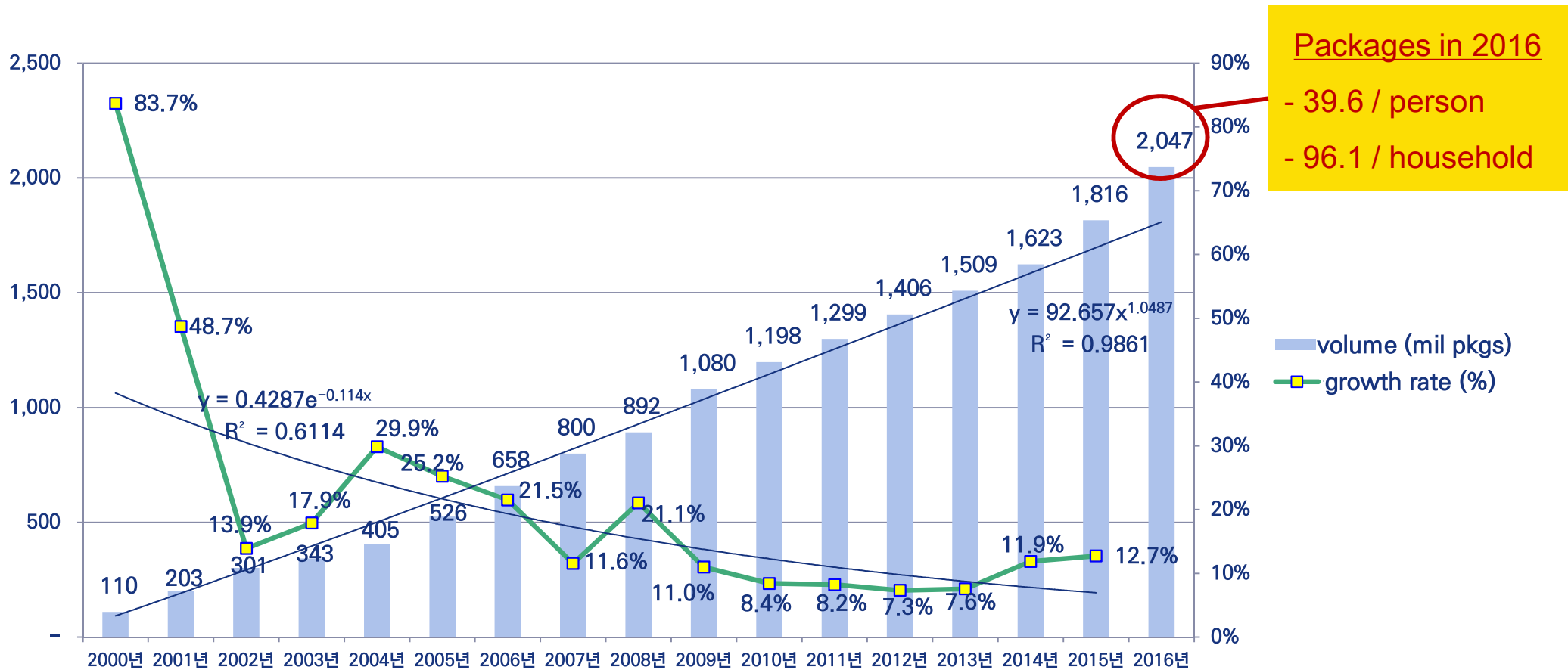


Data source : KOSIS (2014.12~2017.3)

Recent trends in parcel delivery market

❖ parcel delivery service market rapidly growing

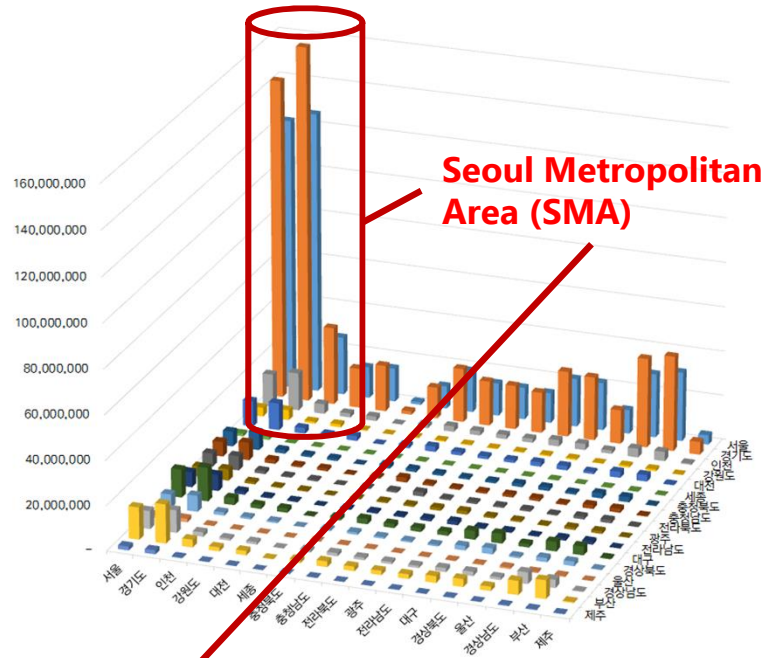
- introductory stage in early 2000s, another growth stage thanks to rapid growth of mobile shopping and open market since 2015
- 0.8 billion+ packages in 2007, 2 billion+ in 2016, 2.3 billion+ in 2017



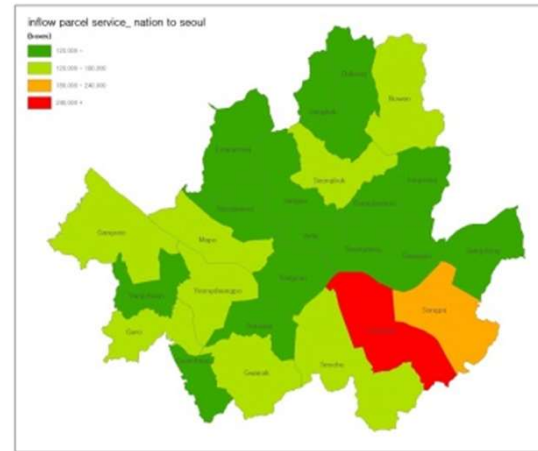
Packages in 2016
 - 39.6 / person
 - 96.1 / household

Data source : KOILA (2016) and Seo and Lee (2017)

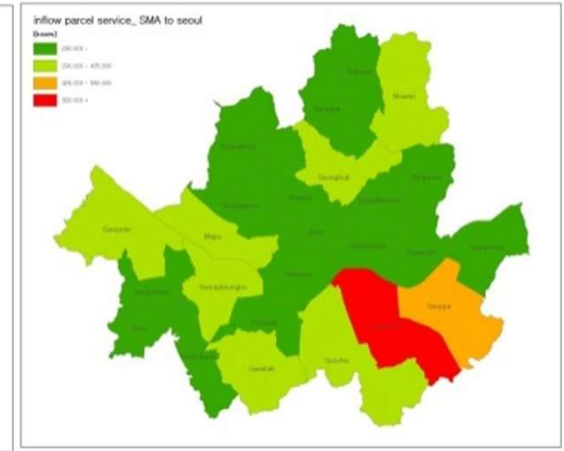
Seoul is a Hotspot of parcel deliveries



- ❖ Seoul Metro Area is **HOTSPOT**
- ❖ variations within the city of Seoul



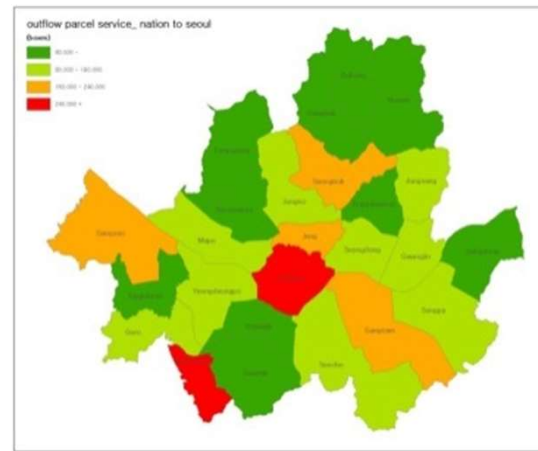
< inflows from others >



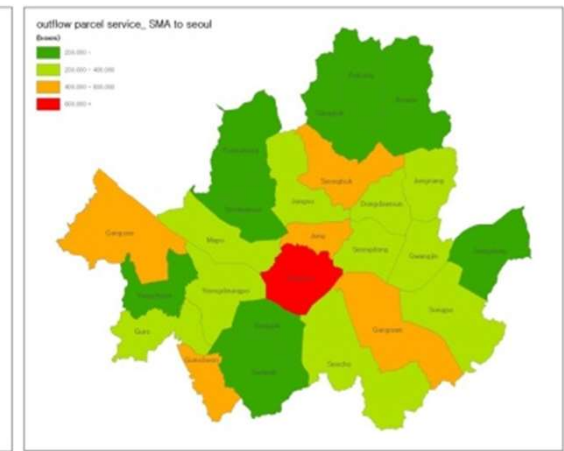
< inflows from SMA >

원산지	서울	경기	인천	강원	세종	충북	대전	충남	대구	경북	부산	울산	경남	전북	전남	제주
서울	7.49%	7.77%	1.61%	0.87%	0.08%	0.63%	0.93%	1.16%	1.33%	1.32%	1.92%	0.66%	1.77%	0.91%	0.89%	0.84%
경기	8.84%	10.15%	2.14%	1.09%	0.09%	0.86%	1.28%	1.49%	1.81%	1.75%	2.63%	0.94%	2.47%	1.24%	1.22%	1.12%
인천	0.91%	1.04%	0.27%	0.11%	0.01%	0.08%	0.12%	0.15%	0.18%	0.17%	0.26%	0.09%	0.24%	0.12%	0.12%	0.11%
강원	0.25%	0.28%	0.06%	0.08%	0.00%	0.02%	0.03%	0.03%	0.04%	0.04%	0.05%	0.02%	0.05%	0.02%	0.02%	0.01%
세종	0.07%	0.09%	0.02%	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.01%	0.02%	0.01%	0.01%	0.00%
충북	0.41%	0.50%	0.10%	0.06%	0.01%	0.09%	0.07%	0.08%	0.09%	0.10%	0.14%	0.06%	0.14%	0.06%	0.05%	0.02%
대전	0.71%	0.75%	0.15%	0.08%	0.01%	0.08%	0.13%	0.15%	0.12%	0.12%	0.18%	0.06%	0.17%	0.09%	0.08%	0.02%
충남	0.41%	0.49%	0.11%	0.05%	0.01%	0.05%	0.07%	0.13%	0.07%	0.08%	0.11%	0.04%	0.11%	0.06%	0.05%	0.02%
대구	0.77%	0.93%	0.19%	0.11%	0.01%	0.08%	0.11%	0.15%	0.24%	0.27%	0.24%	0.09%	0.26%	0.11%	0.11%	0.03%
경북	0.37%	0.44%	0.09%	0.05%	0.00%	0.04%	0.05%	0.06%	0.12%	0.17%	0.12%	0.05%	0.12%	0.05%	0.04%	0.01%
부산	0.89%	1.08%	0.21%	0.11%	0.01%	0.08%	0.12%	0.16%	0.19%	0.22%	0.51%	0.12%	0.38%	0.12%	0.13%	0.03%
울산	0.08%	0.10%	0.02%	0.01%	0.00%	0.01%	0.01%	0.01%	0.02%	0.02%	0.03%	0.04%	0.03%	0.01%	0.01%	0.00%
경남	0.50%	0.62%	0.12%	0.06%	0.00%	0.05%	0.07%	0.09%	0.11%	0.12%	0.23%	0.07%	0.32%	0.07%	0.06%	0.02%
전북	0.37%	0.40%	0.08%	0.04%	0.00%	0.03%	0.04%	0.05%	0.05%	0.05%	0.09%	0.03%	0.08%	0.12%	0.04%	0.01%
전남	0.28%	0.32%	0.06%	0.03%	0.00%	0.02%	0.03%	0.04%	0.05%	0.05%	0.07%	0.02%	0.07%	0.05%	0.08%	0.01%
제주	0.41%	0.45%	0.09%	0.04%	0.00%	0.03%	0.03%	0.05%	0.04%	0.05%	0.08%	0.03%	0.07%	0.04%	0.07%	0.01%
제주	0.11%	0.11%	0.02%	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.01%	0.02%	0.01%	0.01%	0.02%

< interregional flows of parcel freight in Korea >



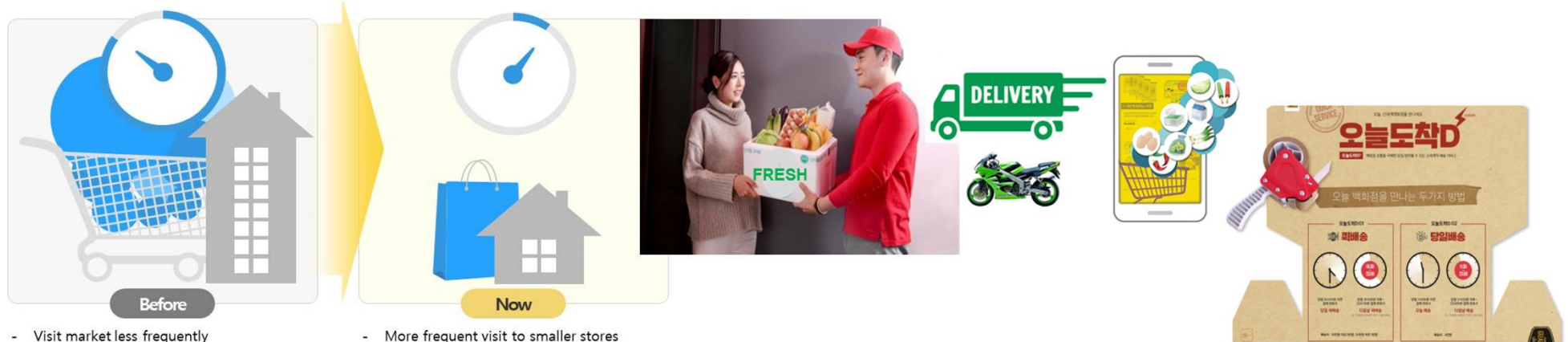
< outflows to others >



< outflows to SMA >

Growing new logistics demands

❖ consumption behavior changed, faster delivery demand growing



- Visit market less frequently
- Buy in big quantity at once

- More frequent visit to smaller stores
- Buy in small quantity

Sources: Brochures of Mesh Korea and Baemin Fresh, etc.

❖ new logistics business model developed

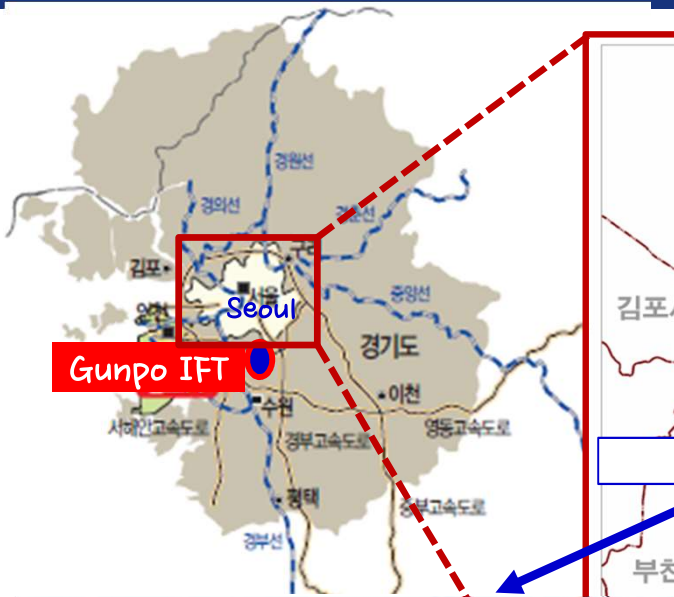
- On-demand logistics services platform / omnichannels

❖ fulfillment services, last-mile delivery services getting significant

▼ retail/logistics/finance integrated platform (eg. Shinsegae) + 'Motorcycle Quick delivery' services (eg. Mesh Korea)



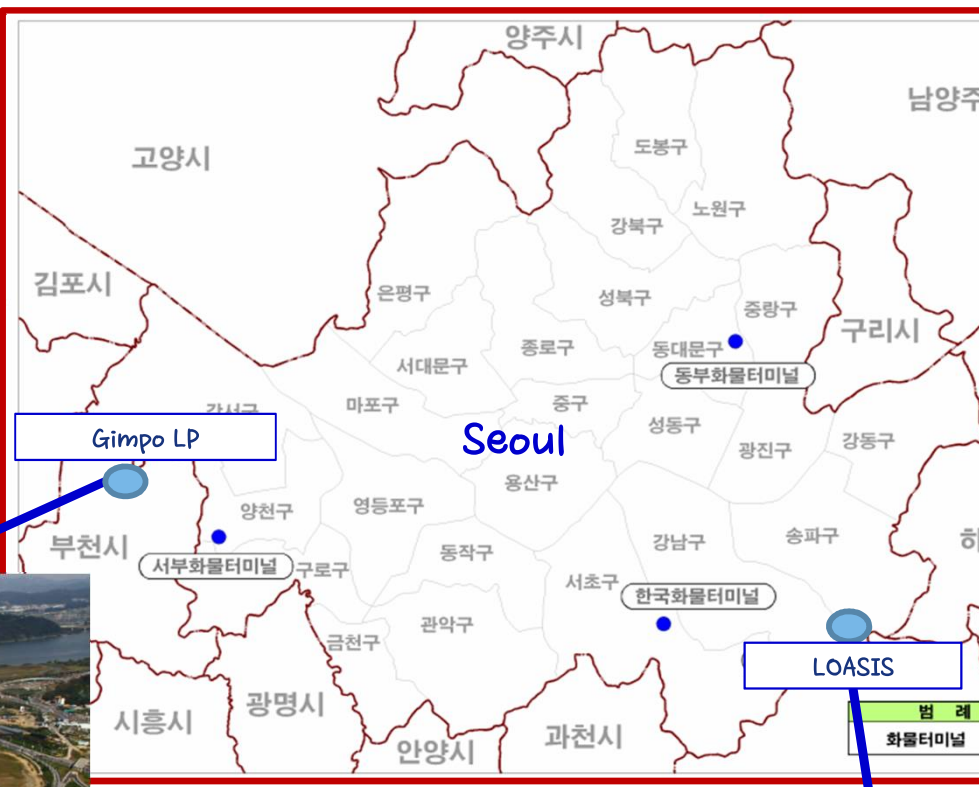
Relocating warehouses, distribution centers



Gunpo IFT



Gimpo Logistics Park



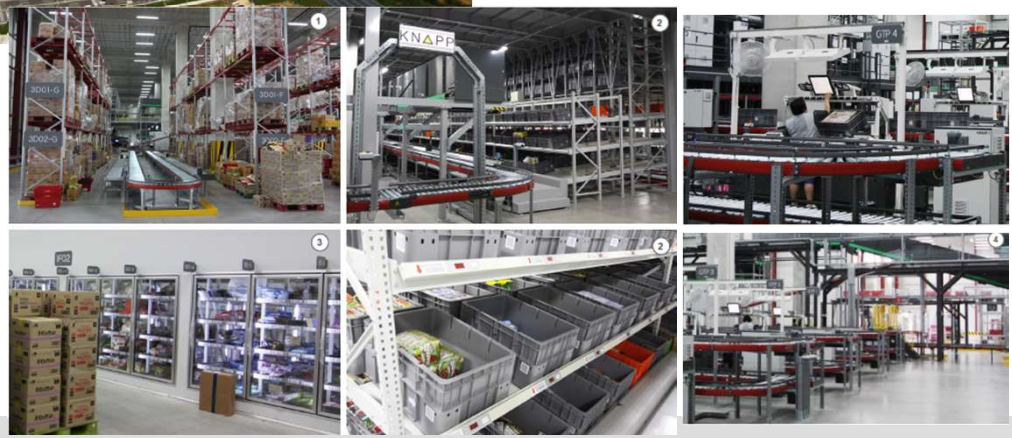
Fulfillment Center for E-commerce



Cold storage using underground

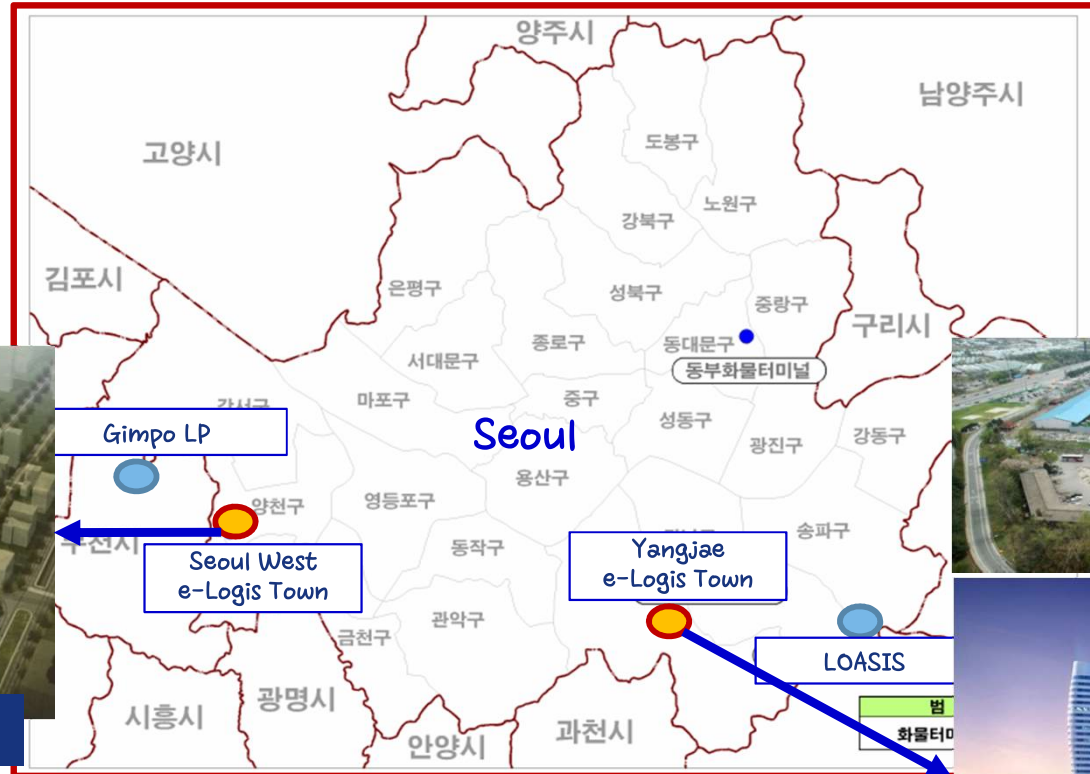


One-way In & Out System



Seoul Ease-South Logistics Park

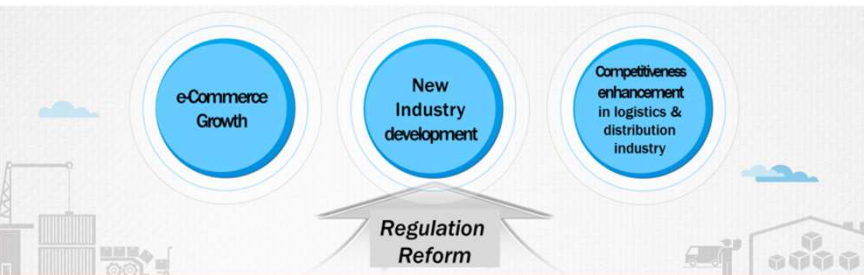
Relocating warehouses, distribution centers



Seoul West e-Logis Town



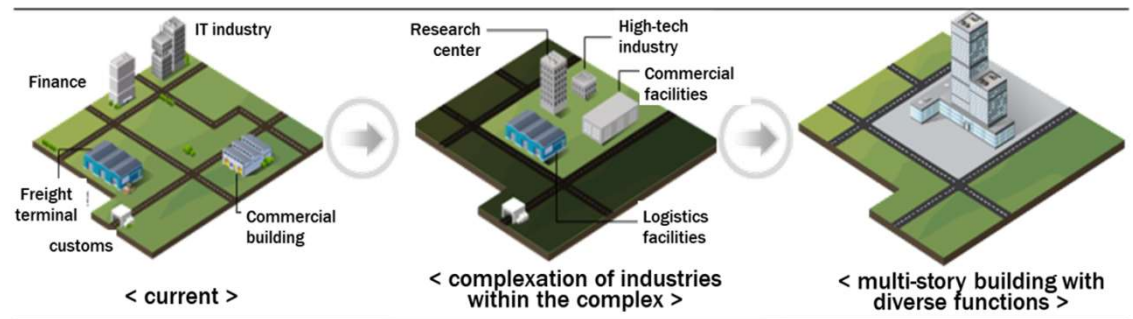
Yangjae e-Logis Town



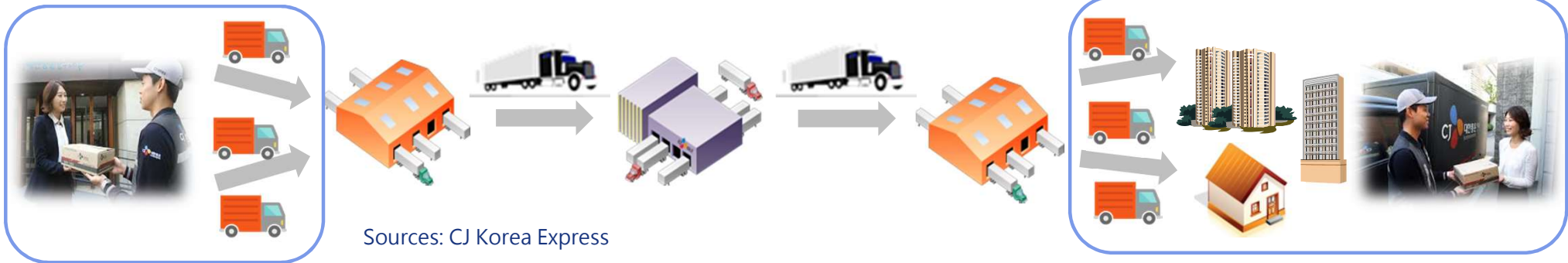
Implementation of e-Logis Town

Development	within City	facility renovation	
Convergence	facilities	functions	related industries
Investment	Start-up biz	ICT infra	R&D center amenities for all users

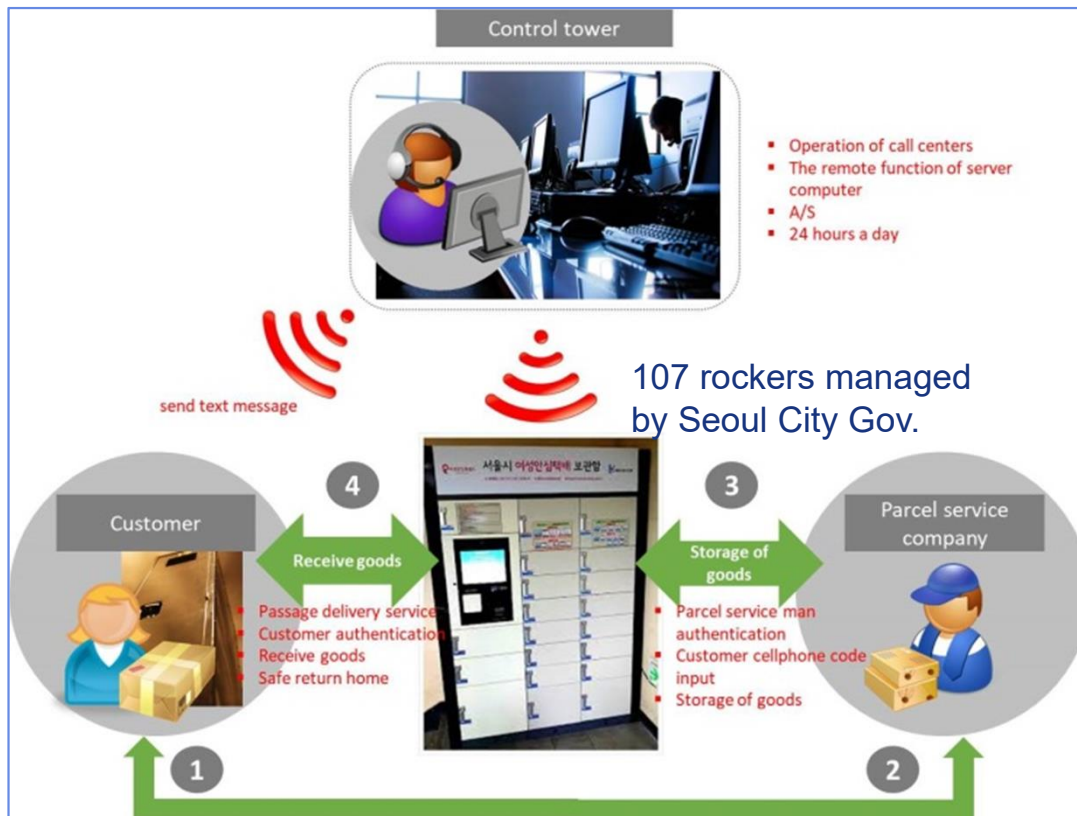
Source : materials of Minister conference for regulation reform (May 6, 2015)



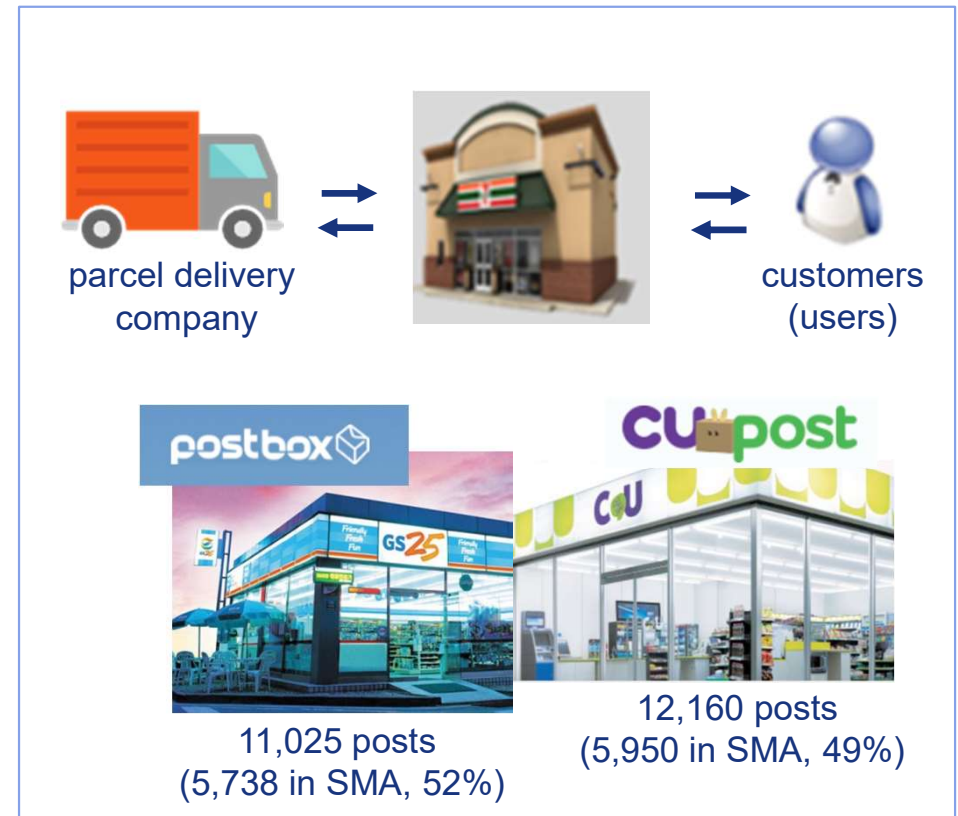
❖ Traditional parcel delivery process



❖ Rockers



❖ Convenience Stores



❖ Biz model 1: Doorman Parcel Delivery

- DOORMAN LOGIS
- pick up and drop off packages on behalf of customers
- deliver the stored packages on time and to the designated place customers want
- Buy and deliver grocery



1 배송지 지정

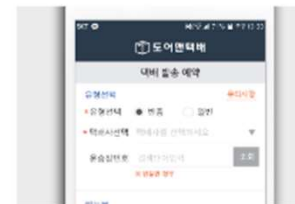


2 대리수령/전달

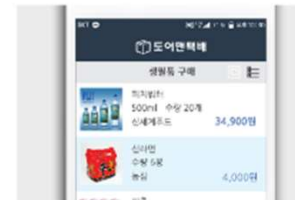


택배
전달과
함께
+

A 반품/발송 대행



B 생필품 구매



Sources: doorman.co.kr, Korea Logistics News

❖ Biz model 2: HOMEPICK



▲ GS칼텍스 삼성로 주유소 홈픽서비스. 출처-GS칼텍스



사진제공-줌마

Source: Zoomma, "HOMEPICK" Brochure

❖ next day delivery

- coupang “Rocket Delivery”



Source: chosun.com, July 18, 2017

❖ instant delivery

- “Quick Service” by motorcycles



- Delivery via subway

- ❖ automatic wheel sorters introduced
 - faster delivery by shortening sorting time (▽1~2hours)
 - 2-time round trips for delivery possible
 - more packages delivered within a day



❖ More diverse items delivered

- durable and nondurable goods including all kinds of grocery and food (inc. ingredients)
- Instant delivery systems



❖ Linked with other services

- laundry cleaning and delivery
- warehousing and delivery



Click



Pack



Pick



Storage



Cloud

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

감사합니다
Thank you

Any Questions, email Jee-Sun LEE at jeeslee@koti.re.kr

KOTI : <http://www.koti.re.kr>