



Cases of the Global IT-SCM System

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KIA MOTORS

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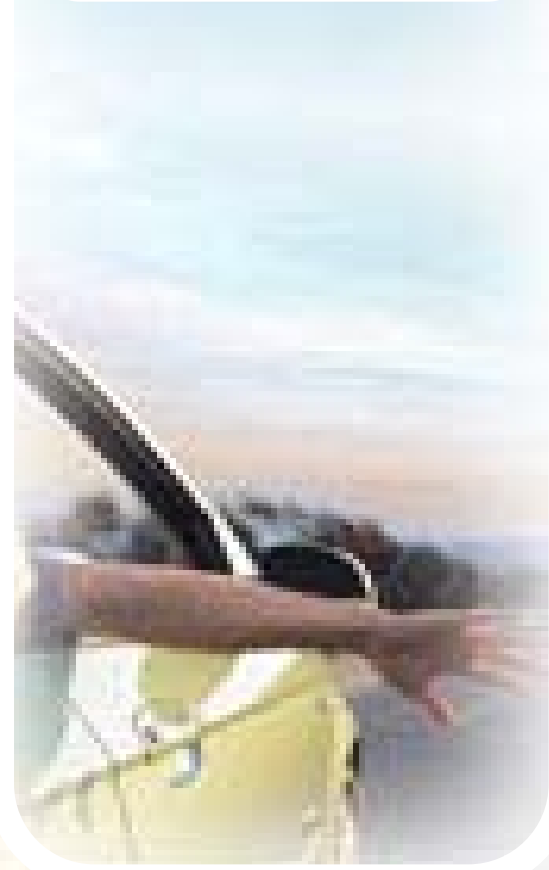


I. Prologue

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I. Prologue

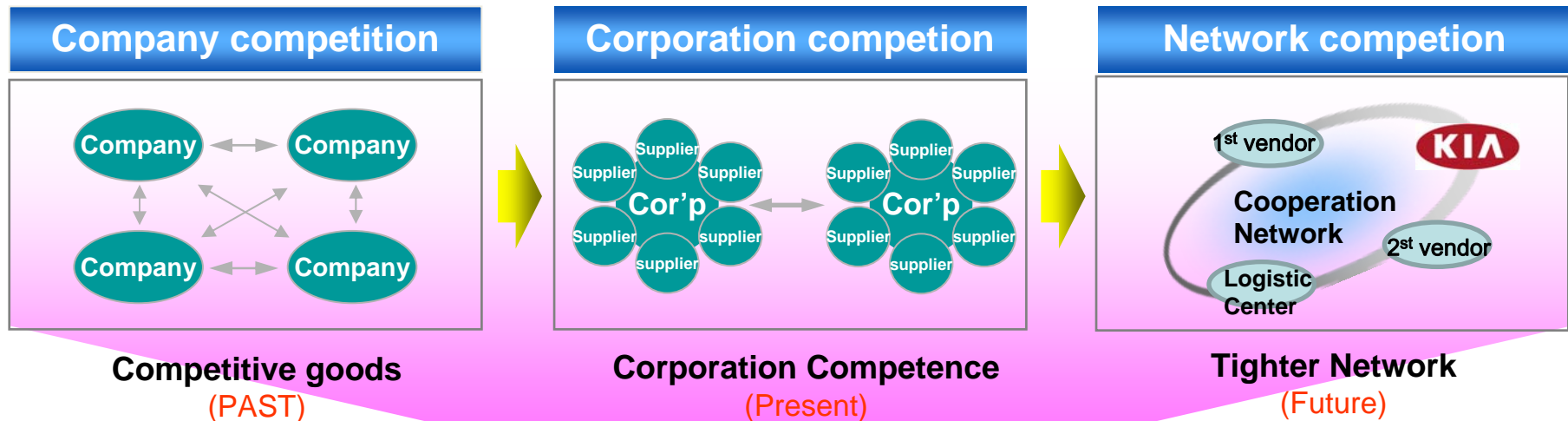
1. Paradigm Shift to Manufacturing

2. SCM Strengthen Plan

1. Paradigm Shift to Global Competing

■ IT technology shifts the corporation competitive to **Collaboration network**.

- IT technology can share the information.
- Increasing exchange the goods, services between nations
- Collaboration between suppliers and major company is important for competitiveness.

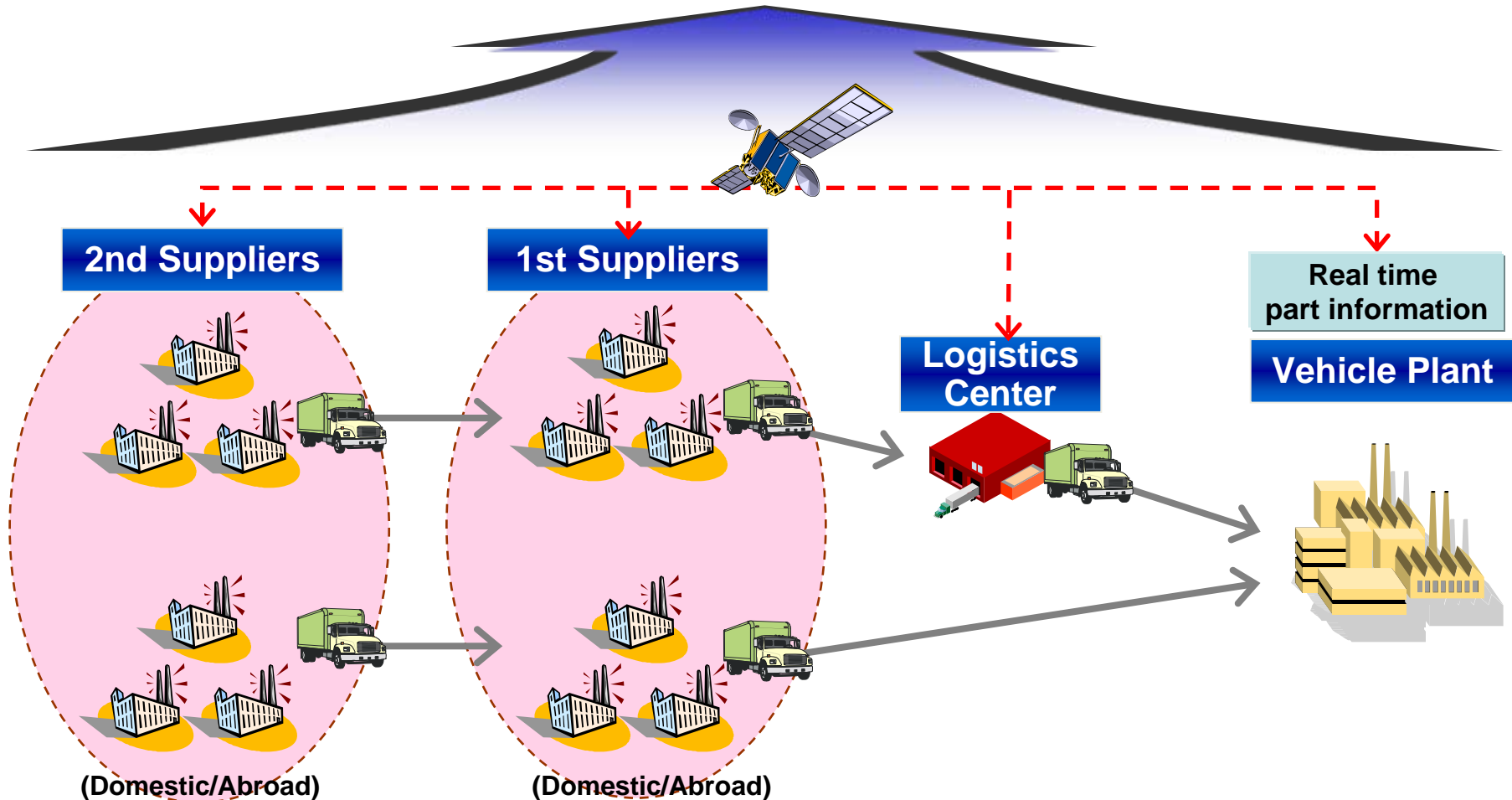


Competitive Corporation has the strong Collaboration Network!!

2. Strengthen Plan Of The Collaboration Network

IT based Collaboration Network for Real time information Sharing

(Vehicle Plant ↔ Logistics Center ↔ 1st Suppliers ↔ 2nd Suppliers)





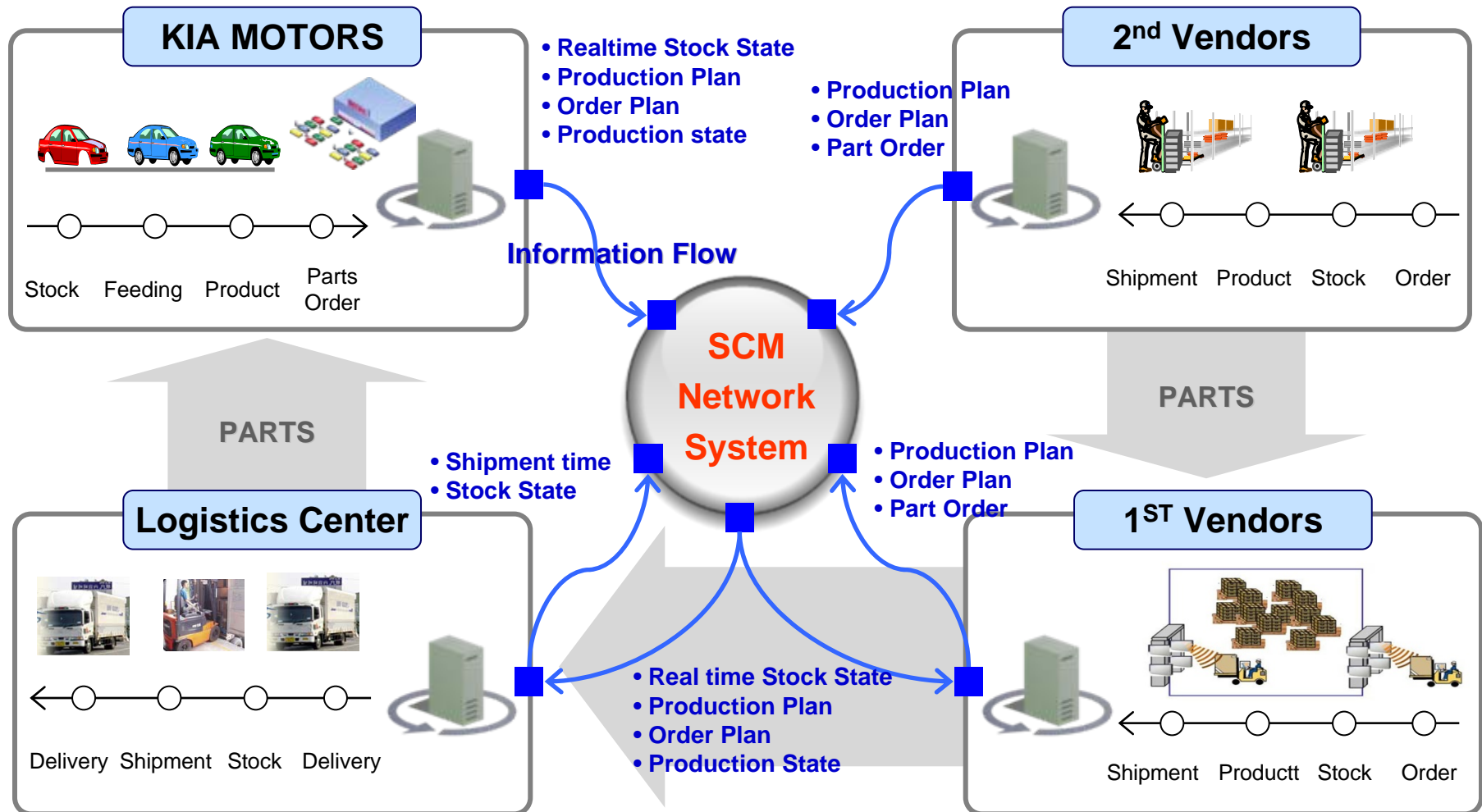
II. Case studies of KIA MOTORS

- 1. Configuration of the Supply Chain Network System**
- 2. Functions of the Supply Chain Network System**
- 3. Effectiveness**

1. Configuration of the Supply Chain Network System

■ Real time SCM Information Sharing

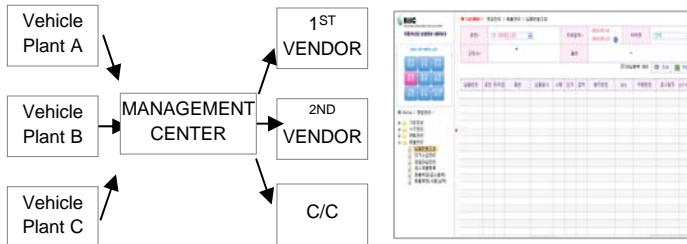
- KIA MOTORS, Logistics Center & Suppliers



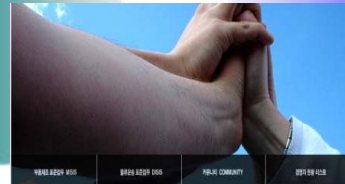
2. Main Functions of SCM Network System

① Strengthen Interface of information of KIA

❖ Extend the 『Search』 function of KIA information

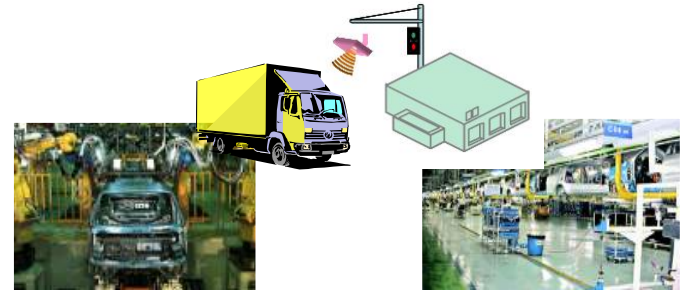


Supply Chain Collaboration Network System



③ Support standard System

❖ The System Interfaced between KIA and Supplier, Logistics Center



② Share the business state of KIA

❖ Display the Management Index



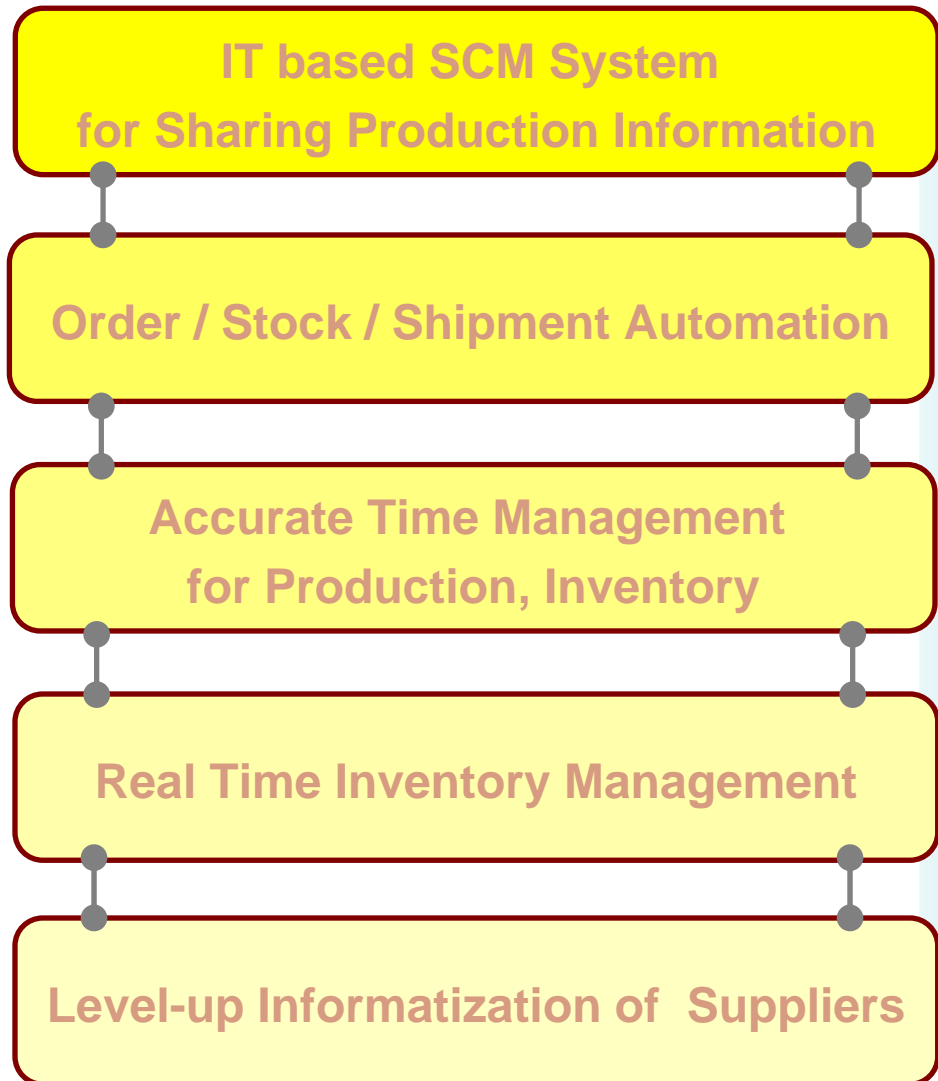
1. Volume of Orders
2. Sales Index
3. Production State
4. SMS Message

④ Manage The HELF DESK

❖ Support the Suppliers by System Failure



3. Effectiveness Of The LINC Systems



Effectiveness

- ❖ Stock Cost Down : ↓ 50%
- ❖ Stock Keeper Down
- ❖ Accurate Demand Estimation
- ❖ Transport Cost Down : ↓ 30%



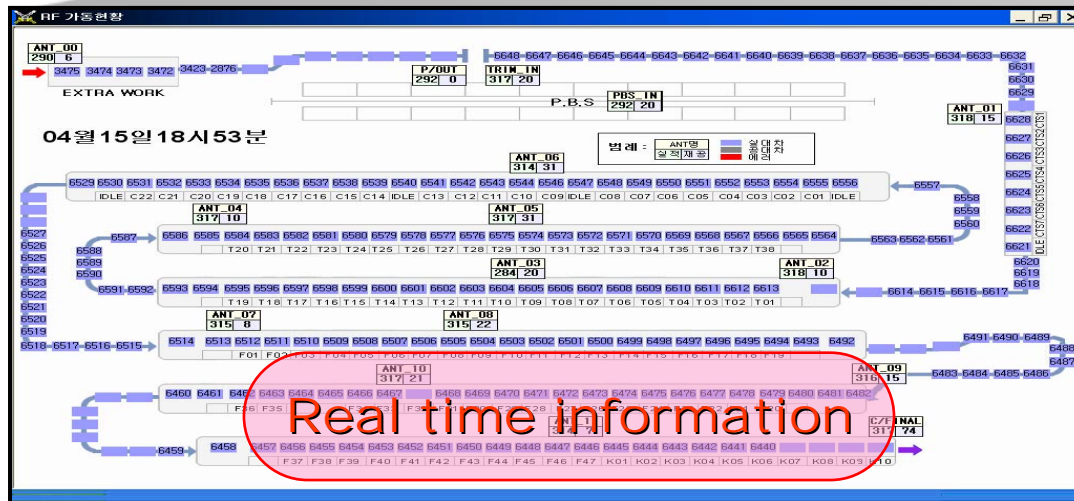
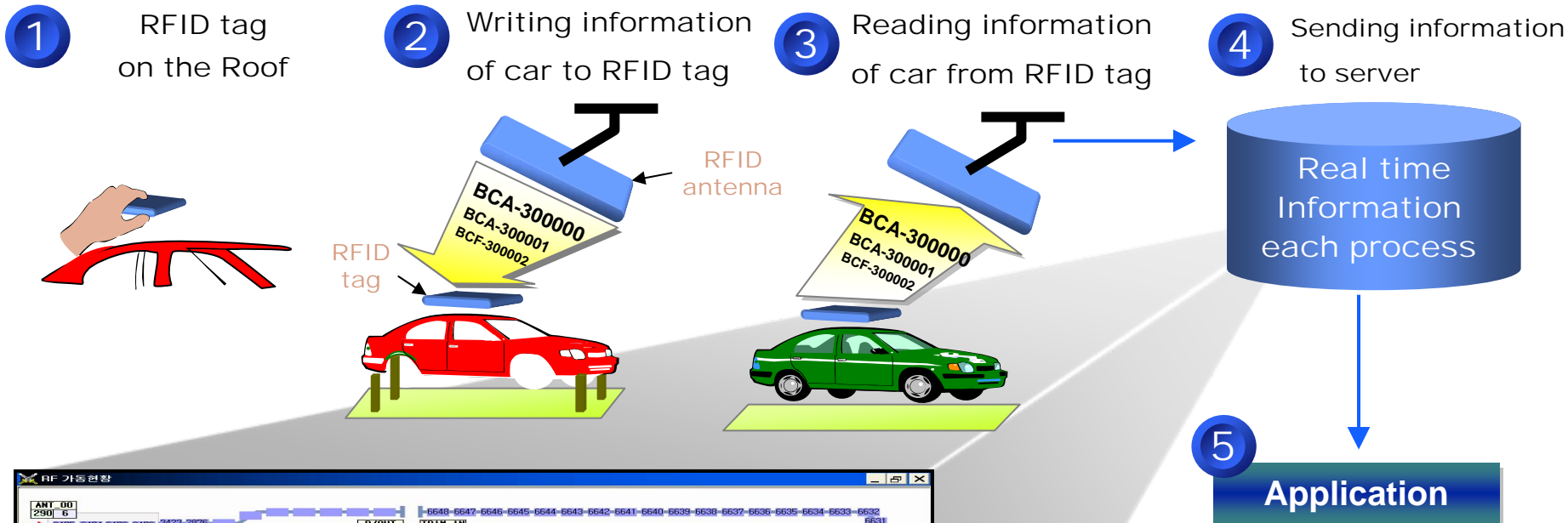
III. Case studies in Korea

1. e-JIT System Process
2. Parts-Tracking System
3. Suppliers management system
4. Time management by RFID TAG
5. Delivery Truck-Tracking System
6. Before & After

1. e-JIT System Process

※ e-JIT : Electronic-Just In Time

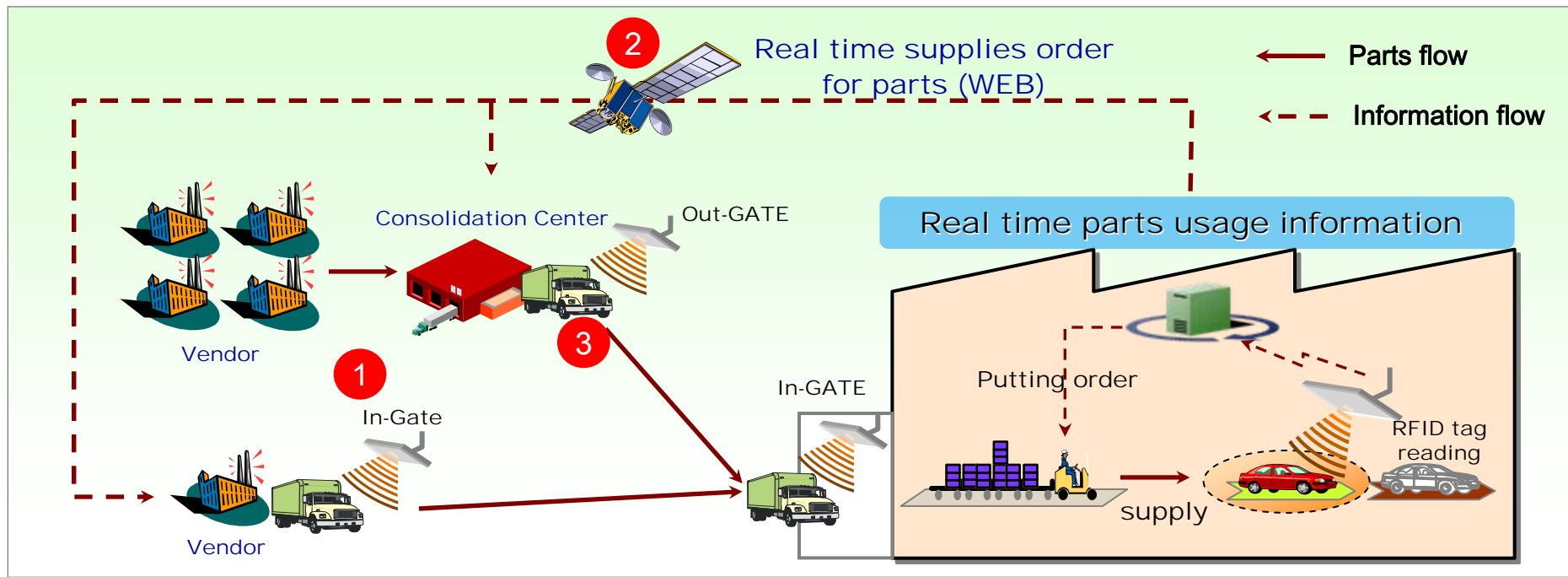
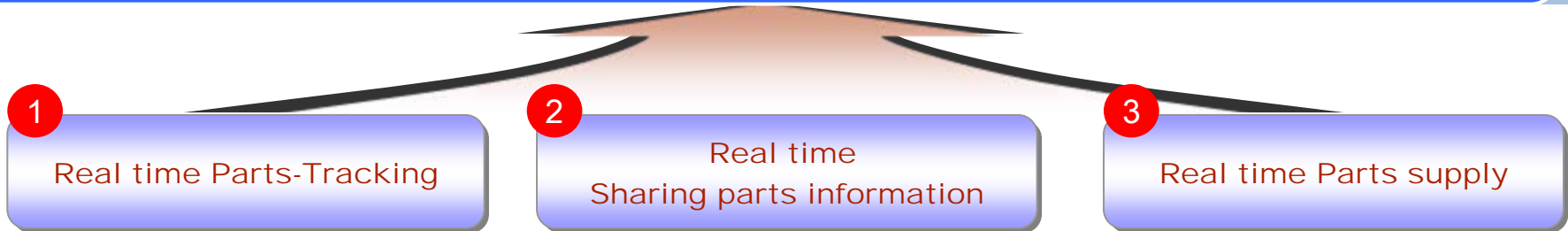
■ Real time Parts-Tracking & Parts-informative & Parts-Feeding System



1. Real time supply order
2. Real time inventory
3. Alarm for lack parts
4. Quality control
5. Searching location

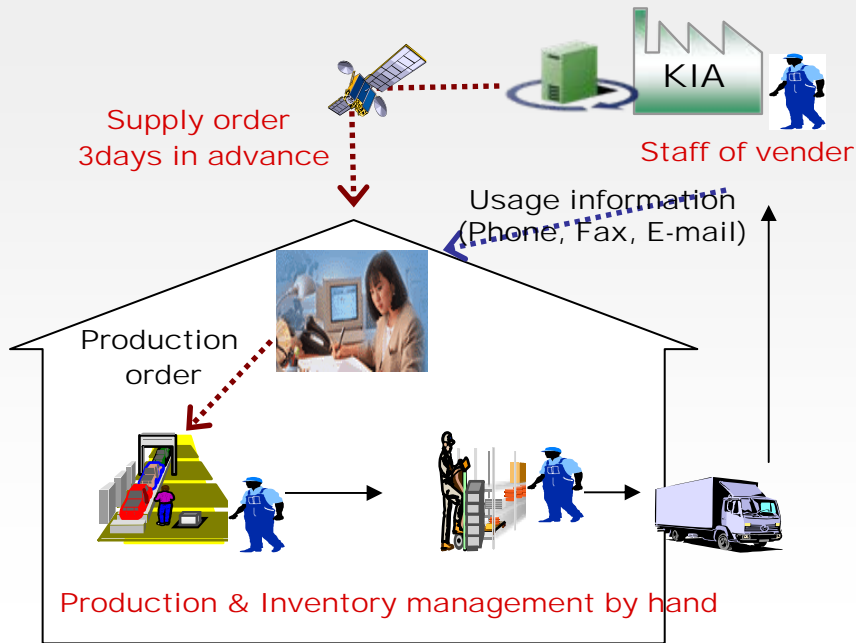
2. Parts-Tracking System

Share the Parts-Tracking **Information with Suppliers & C/C**

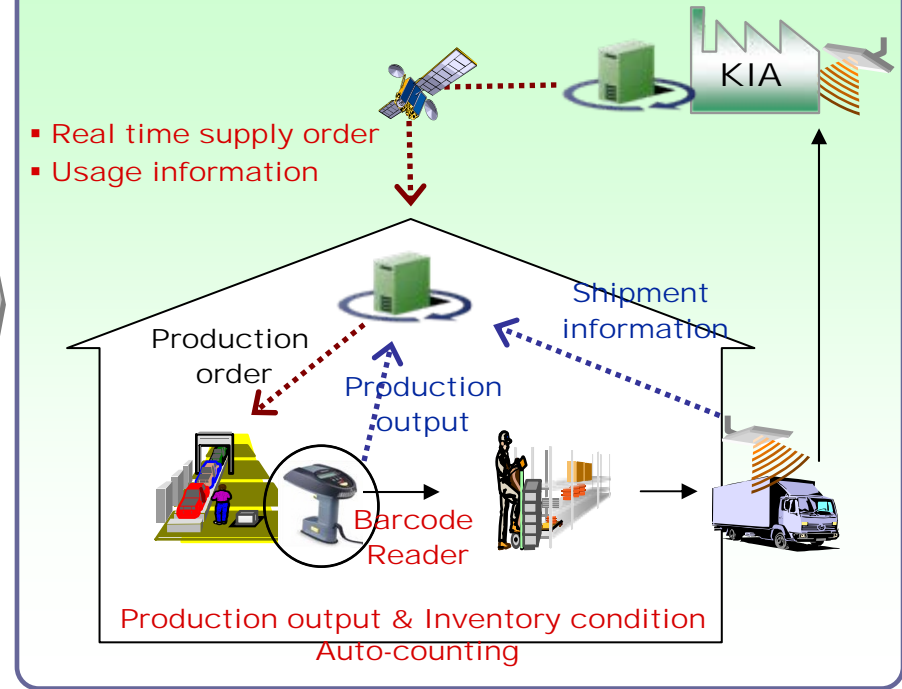


3. Suppliers management system

Before



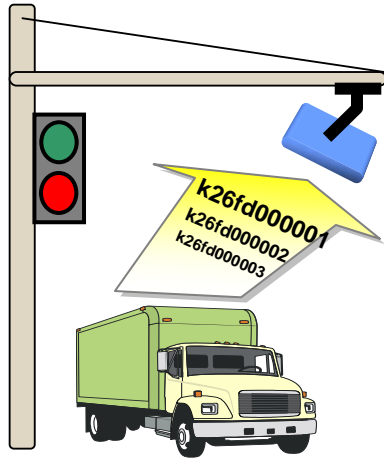
After



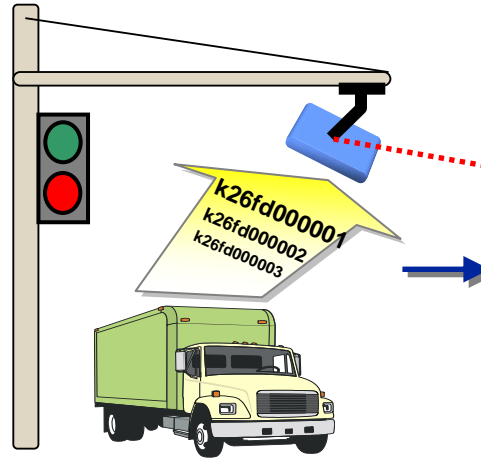
Manual	Production output & Inventory condition	Auto counting by barcode
3days in advance (Flexible)	Supply order	Real time by usage (Non flexible)
Counting by vendor's staff	Amount of usage, supply	Auto counting
Input data by hand	Shipment information	Automatic data by RFID

4. Time Management by RFID Tag

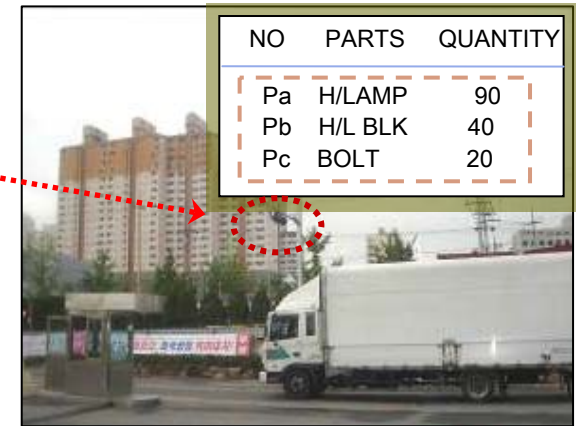
1 Departure (Vendor, C/C)



2 Arrival (KIA)



3 Sending parts information to system



4 Uploading the date to Inventory control system

Inventory control system

NO	Parts	Inventory	IN	Total
Pa	H/LAMP	50	90	140
Pb	H/L BLK	40	40	80
Pc	BOLT	20	20	40

5 Real time parts & inventory control

공장 K2공장 입하예정일자 20060704 선택 납입지시번호 K26FD929981

조회

납입지시번호	부품번호	부품명	지시대수량		입하예정량		총하확정일시	입체출발일시	공장도착일시	입하완료일시
			용기	수량	용기	수량				
K26FD929981	81750-1F000MK	PNL ASSY-TAIL GATE T	2	100	2	100	2006-07-27 09:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929981	83134-1F000	MLDG-RR DR SIDE W/ST	2	100	2	100	2006-07-27 09:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929981	85881-1F000EZ	TRIM ASSY-FR DR SCUF	1	50	1	0	2006-07-27 09:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929981	85886-1F000EZ	TRIM-RR DR STEP, LH	3	150	3	150	2006-07-27 09:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929981	85886-1F000MK	TRIM-RR DR STEP, LH	3	150	3	150	2006-07-27 09:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929982	81750-1F000MK	PNL ASSY-TAIL GATE T	3	150	3	150	2006-07-27 11:36			
K26FD929982	83134-1F000	MLDG-RR DR SIDE W/ST	3	150	3	150	2006-07-27 11:36			
K26FD929982	85881-1F000EZ	TRIM ASSY-FR DR SCUF	2	100	2	100	2006-07-27 11:36			
K26FD929982	85886-1F000EZ	TRIM-RR DR STEP, LH	1	50	1	0	2006-07-27 11:36			
K26FD929982	85886-1F000MK	TRIM-RR DR STEP, LH	1	50	1	0	2006-07-27 11:36			
K26FD929983	81750-1F000MK	PNL ASSY-TAIL GATE T	1	50	1	0	2006-07-24 20:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929983	83134-1F000	MLDG-RR DR SIDE W/ST	2	100	2	100	2006-07-24 20:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929983	85881-1F000EZ	TRIM ASSY-FR DR SCUF	2	100	2	100	2006-07-24 20:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00
K26FD929983	85886-1F000MK	TRIM-RR DR STEP, LH	2	100	2	100	2006-07-24 20:30	2006-07-27 09:35	2006-07-27 10:00	2006-07-27 11:00

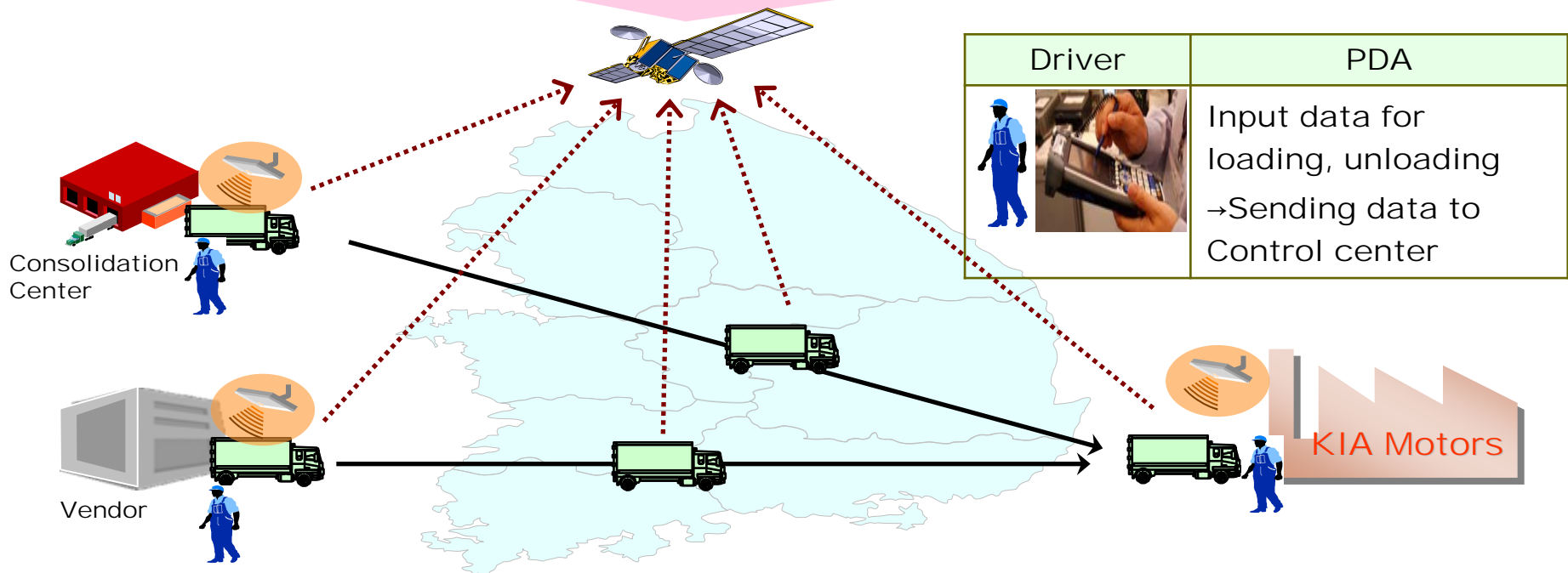
Parts Supply Chain Management

5. Delivery Truck-Tracking System

❖ Real time delivery trucks control → Prevent traffic jam , Cost down, SCM



Car No	Driver' name	Condition					Loaded Parts	Quantity
		Departure (Place)	Arrival (Place)	Now (Place)	Remain (Km)	Speed		
△△△△	○○○	-----	-----	-----	-----	○○	-----	○○
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6. Before & After

-	Before	After (RFID System)
Order cycle	Once a day (By product plan)	Real time (By usage)
Order accuracy	58%	99%
Order source	Product plan	Parts usage
Warehousing	Card (manual)	RF TAG (automatic)
Line supply	Worker's Judgment (2~4 times/day)	By Usage (10~20 times/day)
Stock amount information	Once a day	Real time
Supply failure information	No	Yes
Trucks-Tracking	No	Yes



IV. Case studies in Foreign

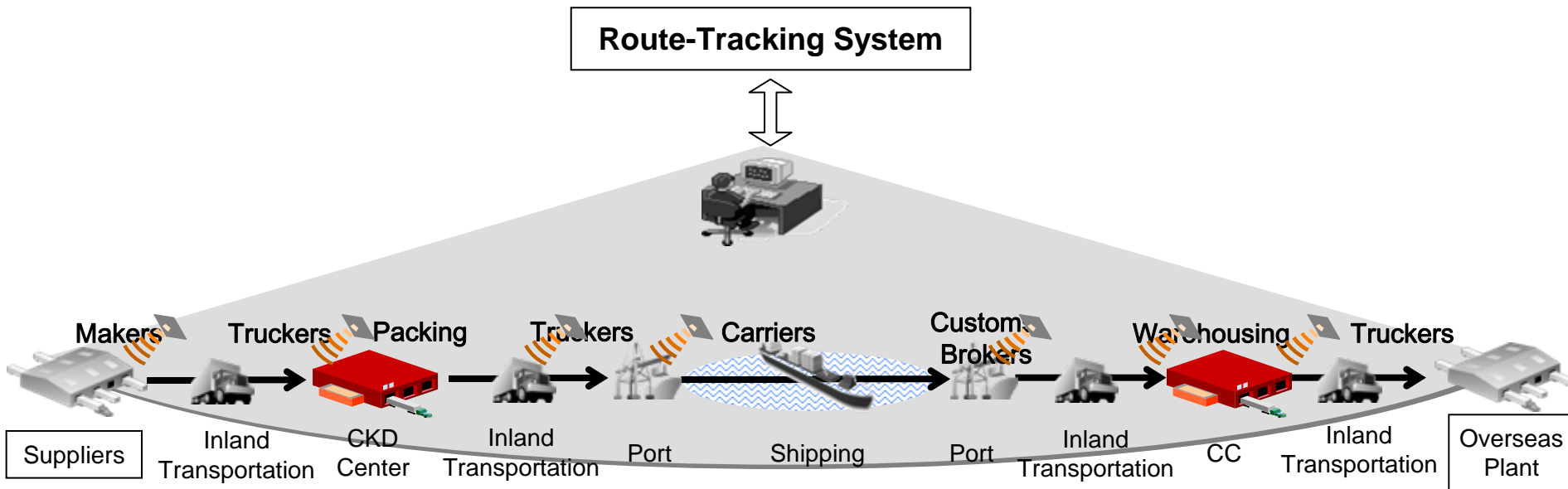
- 1. CKD Parts Position-Tracking System**
- 2. Export Cars Position-Tracking System**
- 3. Container Location-Tracking System**

1. CKD Parts Route-Tracking System

※ CKD : Complete Knock Down

○ CKD parts route-Tracking : 9 sections

- Preventing parts loss
- Low special delivery cost by air transport



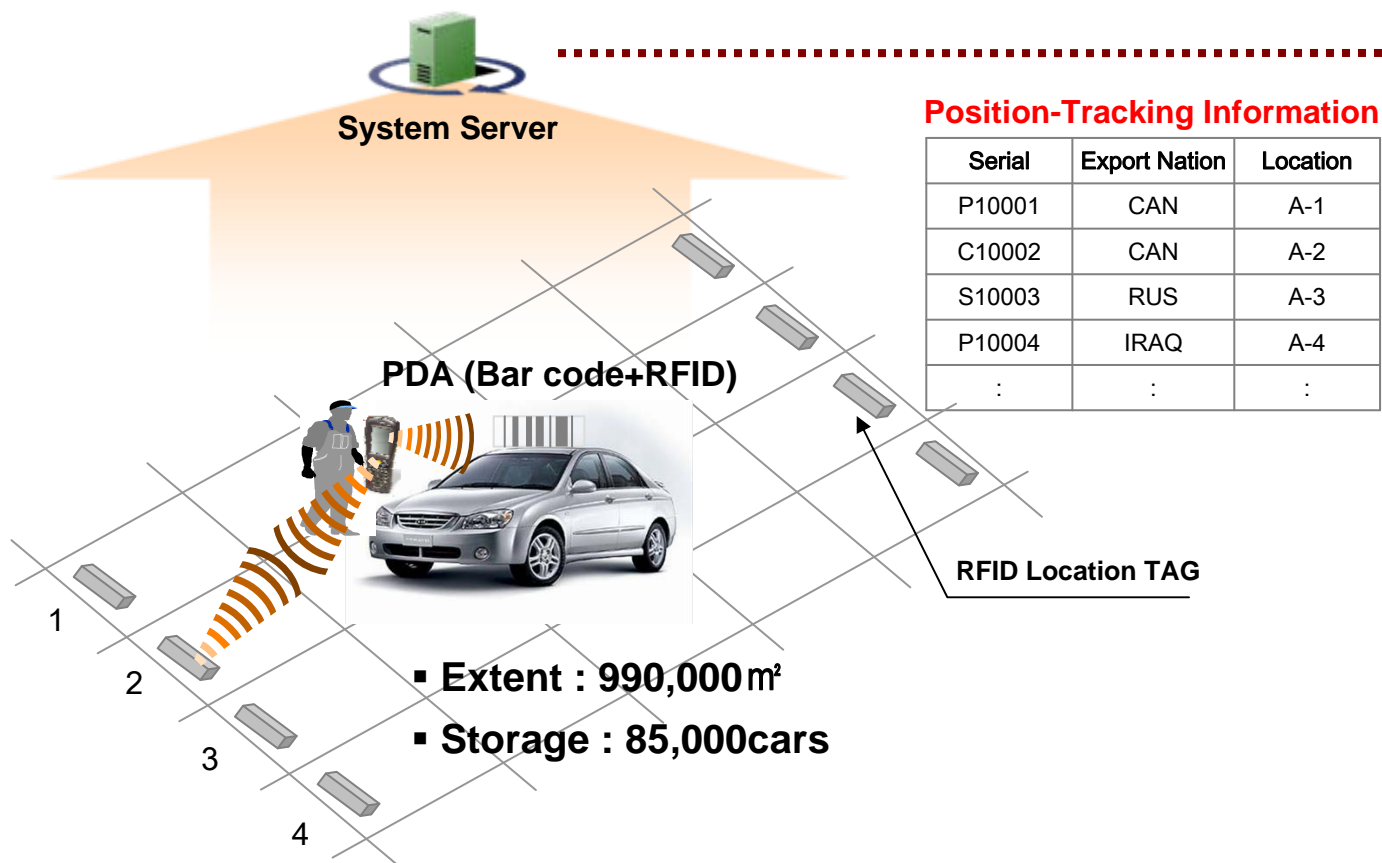
○ Spectrum of the data gathering by RFID TAG

- Suppliers → CKD Center (Domestic) : CKD center Arrival Time, BOX packaging, Container Loading
- CKD Center → Abroad Port : Domestic Port Arrival Time, Abroad Port Departure Time
- Abroad Port → Abroad C/C : C/C Arrival Time, Container Open, BOX Storage management, BOX Open

2. Export cars Position-Tracking System

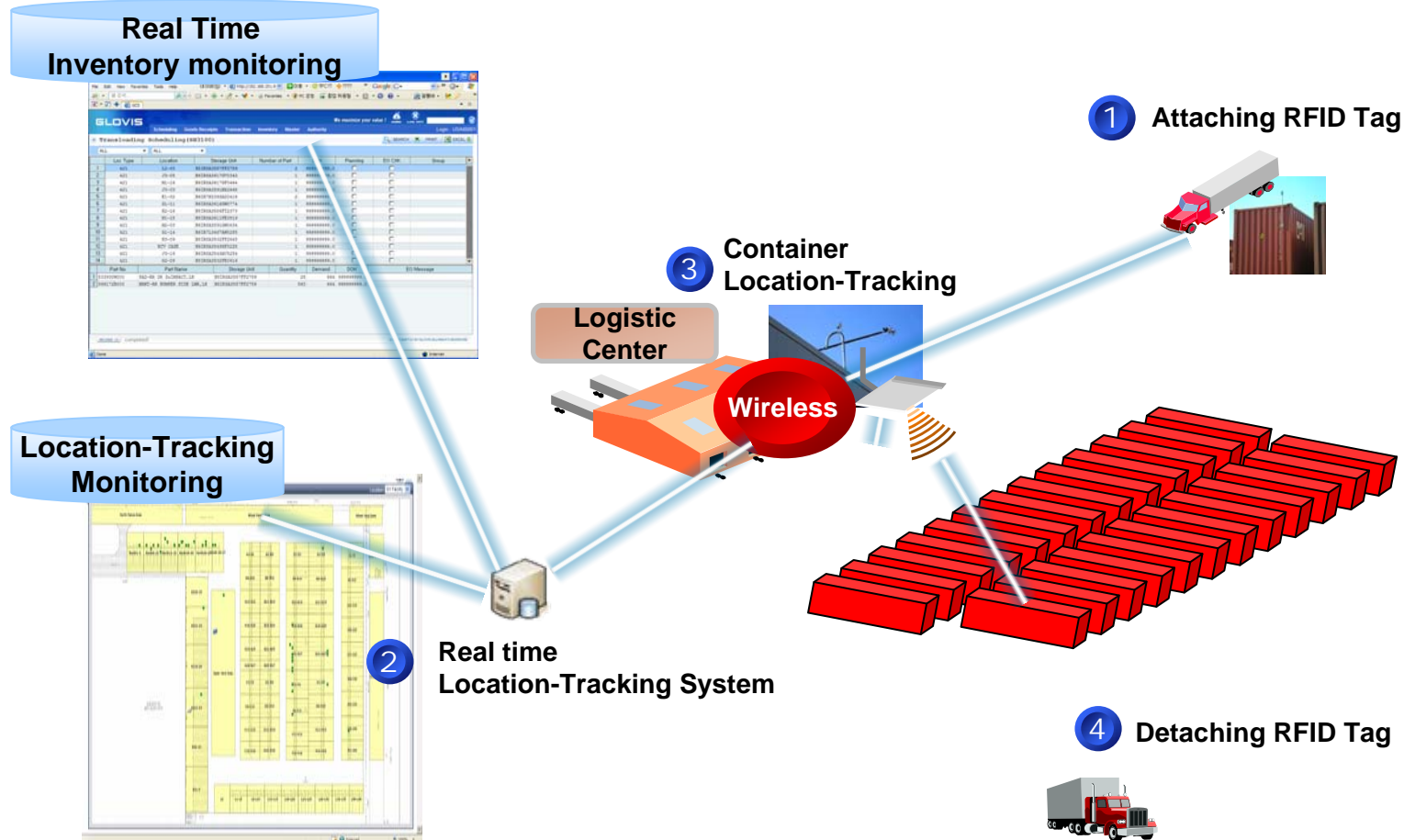
○ More accurate & Fast Vehicles Searching

- Storage extents : 990,000m² (85,000 cars)
- RFID Tag : 20,000 tags



3. Container Location-Tracking System

- Optimizing Inventory Management





Thank you!!