

# SMART WAREHOUSE

For ACHIEVING COMPANY'S  
COMPETITIVE ADVANTAGE

BERTY ARGYANTARI  
July 21, 2021



**THRIVE  
THROUGH INNOVATION**





## ENSEVAL at A GLANCE

PT Enseval Putera Megatrading Tbk is an Indonesia's leading healthcare distributor



### Business Portfolio

#### Our Services



#### Our Products



DISTRIBUTION NETWORK

30+  
Manufactures

50+  
Principals

2  
Distribution  
Centers

- RDC Jakarta
- RDC Surabaya
- Branch Office

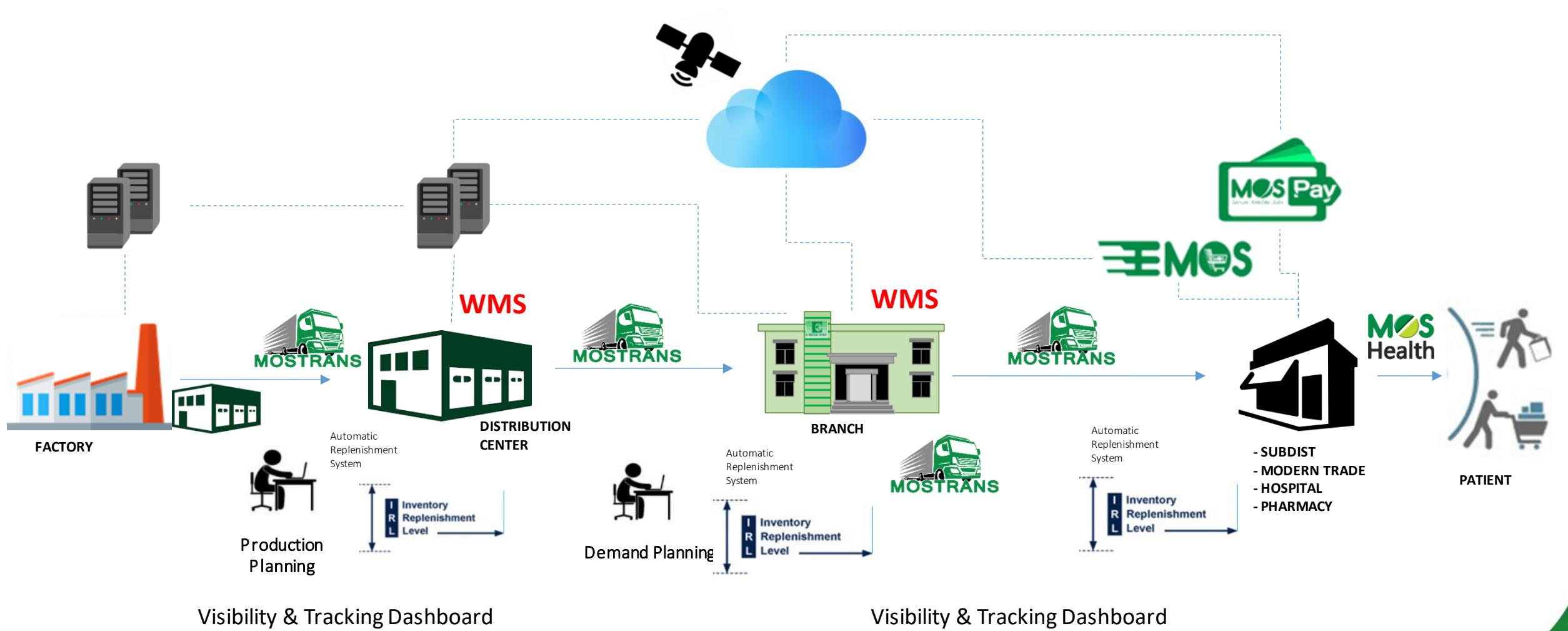
70+  
Branches

40+  
Transportation  
Vendors

4,500+ SKU



e-2-e SUPPLY CHAIN CYCLE





## WAREHOUSE PROFILE



Location : RDC Cikarang Pusat Deltamas – PT Enseval Putera Megatrading Tbk

### The WAREHOUSE has 4 storage facilities



#### Ambient Room

Storage Temperature  
25-30°C



#### Cool Room

Storage Temperature  
below 25°C



#### Chiller Room

Storage Temperature  
2-8°C



#### Frozen Room

Storage Temperature  
(-25) – (-15 )°C

*The facility carried out  
the technology innovation, green  
and lean logistics*

- Supported by Oracle based-WMS that manage stock from inbound-inventory-outbound and Enseval Visual Analytics (EVA)
- Equipped with solar cell, rainwater harvesting system, automatic guided vehicle (AGV)
- Equipped with modern warehousing infrastructure

## SMART WAREHOUSE MANAGEMENT

# WAREHOUSE MANAGEMENT



Warehouse management is the act of organizing and controlling everything within the warehouse – and making sure it all runs in the most optimal way possible

## It is desirable to optimize:

1. Space utilization
2. Equipment utilization
3. Labor utilization
4. Accessibility of all material
5. Protection of all material
6. Inventory holding





Smart Warehousing is essentially a set of interconnected and automated technologies for streamlining warehousing operations in an efficient manner

### The Driver of the Adoption Smart Warehouse

- 01 Customer Expectation
- 02 Market Disruption
- 03 Increasing Operational Complexity



## FEATURE OF SMART WAREHOUSE SYSTEM

- Smart warehouse system describes the connection of all processes within a warehouse
- The physical operation is integrated with the digital processes

01

### **Agile Warehouse Management**

Quickly adapt to manage the rapidly changing variables in today's world and constantly strive to optimize the movement of products from receiving to shipment

02

### **Warehouse Scalability**

The warehouse should be in a position to accept large product instantaneously in response to need

03

### **Warehouse Visibility**

Allow the parties to quickly find what they need through visibility and information sharing in real time

## WHY DO SMART WAREHOUSE NEED TO BE EQUIPPED WITH TECHNOLOGIES?

The automated and interconnected technology solutions work together to provide visibility, free flow of information and data to improve:

- **Productivity** → optimize throughput, less workforce
- **Efficiency** → reduce lead time and cost, optimize space utilization
- **Health, safety and security** → lower risk of injury, mitigate risk, lower equipment or product damage
- **Accuracy** → less human error, better access to real time information
- **Responsiveness** → enhance information sharing, better communication and decision making, timely customer service, improve customer satisfaction

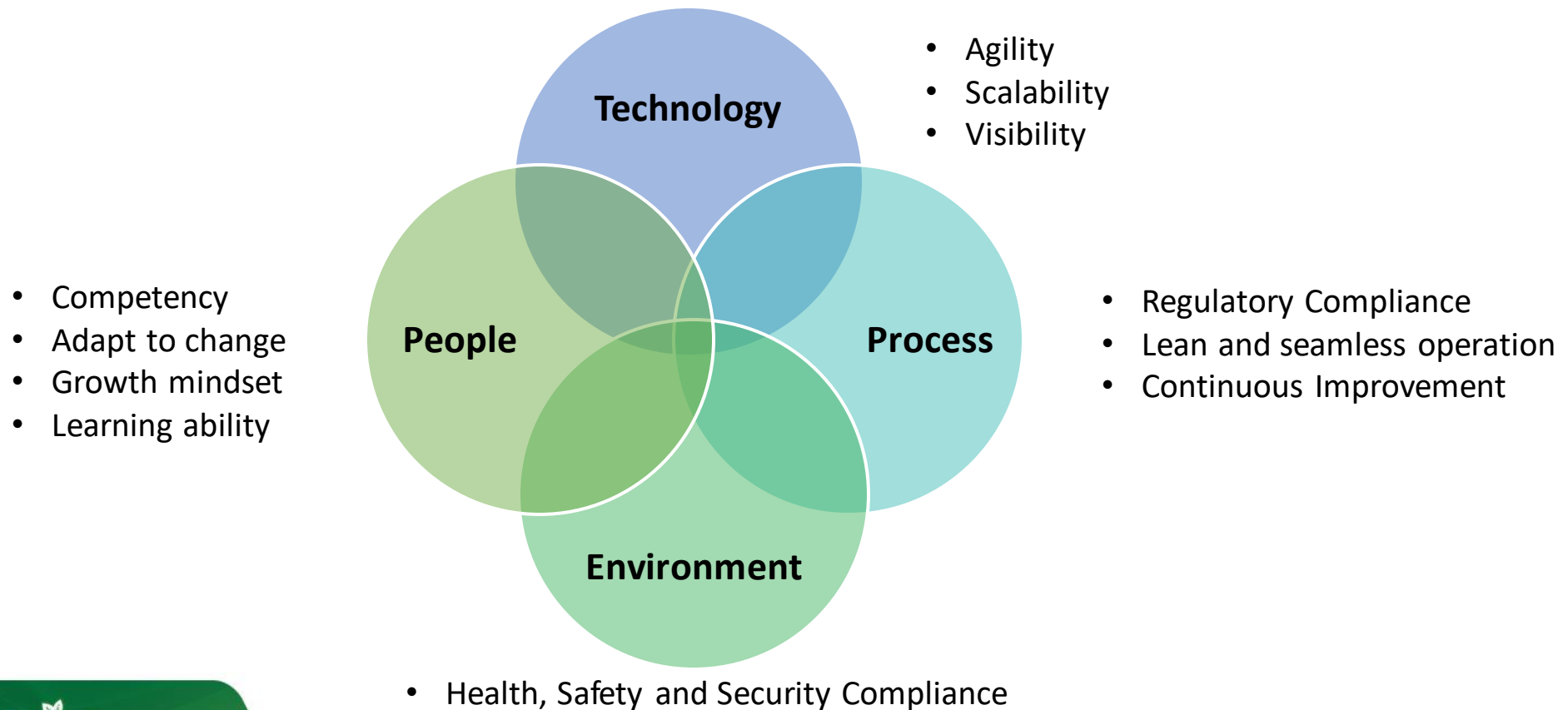


**Improve competitive advantage**



## KEY ELEMENT OF SMART WAREHOUSE

- Smart warehouses approach their operations as a series of interconnected operations by ***technology, people, processes and environment***
- Each deserving attention and critical examination to promote value added creation





**HERE IS A LOOK AT TECHNOLOGY BEING APPLIED  
IN THE WAREHOUSE OPERATION**

## LOADING DOCK AREA



The area is connected to Automated Guided Vehicles (AGV) with manufacturers and raw material warehouse in the area

The area is equipped with:


- Secured entrance gate
- High Tech CCTV monitors
- Good lighting
- Dock leveler telescopic system

# INBOUND OUTBOUND ACTIVITY



Supported by Warehouse Management System (WMS) and equipped with barcoding system with mobile barcode reader





- Streamline warehouse process
- Eliminate duplication
- Reduce human error
- Increase warehouse operation accuracy




Inbound Monitoring

Main Menu

Regional Distribution Center  
PT. Enseval Putera Megatrading Tbk.  
Rawanglami, Kawasan Industri Pulogadung, Jakarta Timur

Queue Number	Expedition	Vehicle Type	Vehicle Number	Arrival Time	Unloading			Information	Status
					PIC	Start	Finish		
1G135	NUTRAGEN	C.DIESEL ENGKEL 3T/5M3	B 9005 QS	07-Jul 07:30		07-Jul 11:33		Queue	Process
1G136	XPRESINDO	C.DIESEL 4.5T/12M3	B 9194 FXU	07-Jul 07:31		07-Jul 11:33		Queue	Process
1G141	YASODANA	C.DIESEL 4.5T/12M3	A 8820 FL	07-Jul 10:29		07-Jul 13:20		Queue	Process
1G142	BANGKA JAYA LINE PL 10	CONT 20FT 18T/30M3	B 9516 UIZ	07-Jul 10:29		07-Jul 11:35		Queue	Process

























Outbound Monitoring

Main Menu

Regional Distribution Center  
PT. Enseval Putera Megatrading Tbk.  
Rawanglami, Kawasan Industri Pulogadung, Jakarta Timur

Halaman 2 dari 6

List Picking No	Destination	Dock Door / Staging Line	Vehicle No	Arrival	Consol	Loading		Surat Jalan	
						Start	Finish	Start	Finish
SEP-273548	BEKASI	EKO / B	B 9737 SYN	 PLAN 09:30 ACTL 08:55	 PLAN 09:20 ACTL 15:53	 PLAN 09:30 ACTL 08:24	 PLAN 10:15 ACTL 08:24	 PLAN 10:20 ACTL 08:38	 PLAN 12:05 ACTL 10:28
SEP-273535	JAKARTA-1	/	T 9431 DB	 PLAN 10:30 ACTL 09:11	 PLAN 09:50 ACTL 09:38	 PLAN 10:00 ACTL 09:48	 PLAN 10:45 ACTL 09:48	 PLAN 10:50 ACTL 08:09	 PLAN 11:05 ACTL 09:55
SEP-273539	SURABAYA-2	/	B 9445 KXS	 PLAN 10:30 ACTL 09:18	 PLAN 09:50 ACTL 10:22	 PLAN 10:00 ACTL 10:46	 PLAN 11:00 ACTL 10:47	 PLAN 11:05 ACTL 11:06	PLAN 14:50
SEP-273540	SURABAYA-1	/	B 9445 KXS	 PLAN 10:30 ACTL 09:19	 PLAN 09:50 ACTL 10:18	 PLAN 10:30 ACTL 10:44	 PLAN 11:00 ACTL 10:45	 PLAN 11:05 ACTL 08:30	PLAN 14:50

THRIVE  
THROUGH INNOVATION



## STORAGE ACTIVITY



### The inventory management is supported by:

- Warehouse Management System (WMS) to manage the inventory by location, SKU, batch number and expired date
- EISO (Enseval Integrated Stock Opname)  
An inventory control platform to allow the automate stock counting → faster reporting and paperless

### The lighting is supported by LED light with motion sensor

### For Cold Chain storage:

- Sitrad Digital sensor → the real time temperature monitoring and notification system
- High speed door with automatic motion sensor → provide a stable cold temperatures, bring down energy consumption, maintain inside environment clean and safe

## DELIVERY ACTIVITY

Enseval works with Mostrans to build long-term strategic collaborations and partnerships with transportation partners



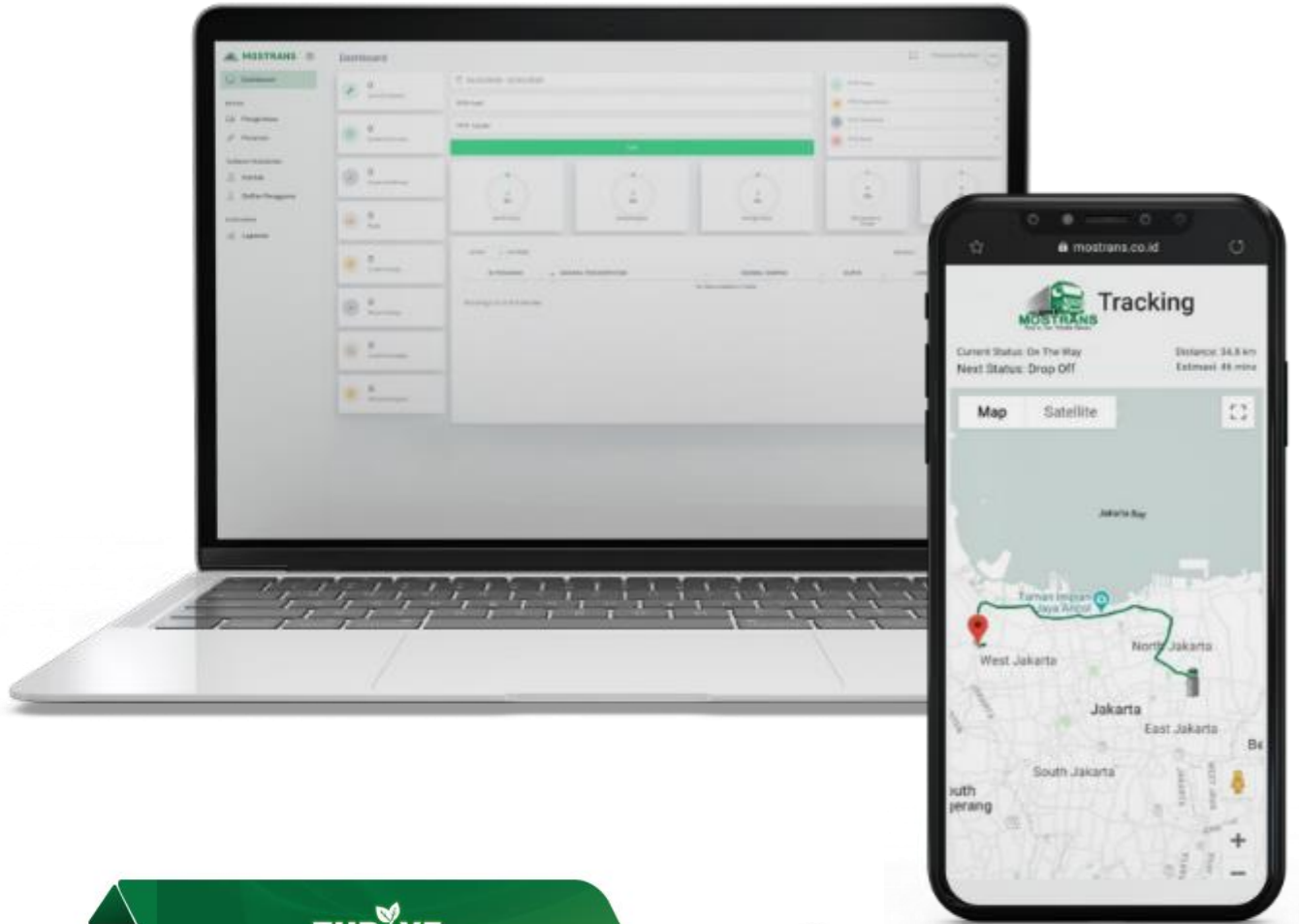
MOSTRANS has been launched on **10.10.19**  
as the **1<sup>st</sup> B2B digital transportation platform** in Indonesia to connect  
**healthcare supply chain eco-system**



[www.mostrans.co.id](http://www.mostrans.co.id)



## SHIPMENT DASHBOARD



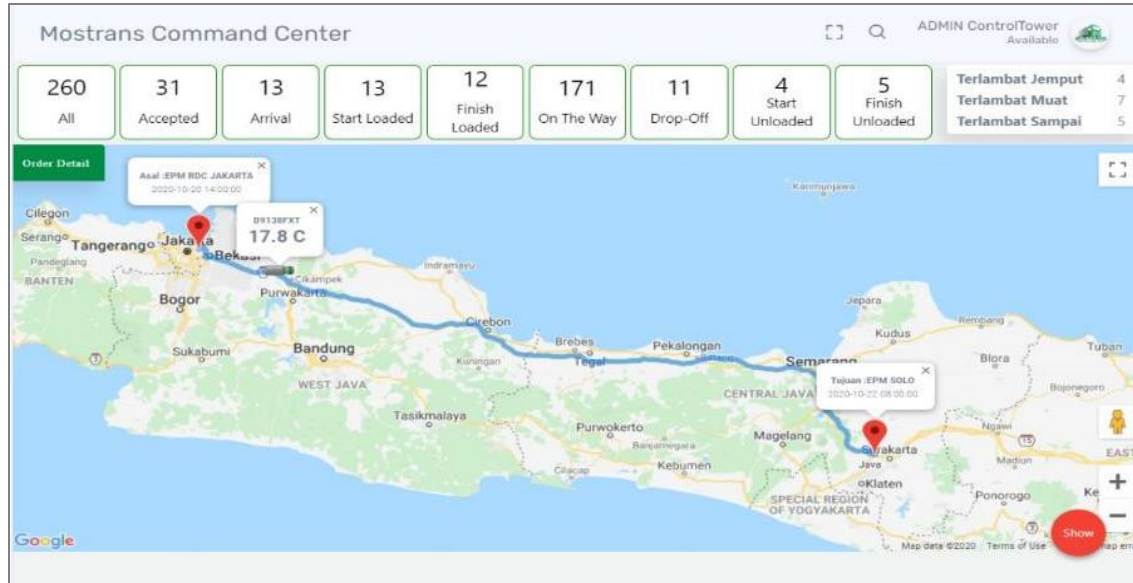
The “easy to use” shipment dashboard aims to visualize the real time information of shipment activity

Shippers and transporters can access information, get notification, monitor the shipment journey, and receive performance report on real time basis

- Streamline coordination
- Enable capture process discrepancies and continual feedback in real time



# COMMAND CENTRE



- The command centre aims to visualize the e-2-e shipment journey and order status
- It is connected to vehicle GPS and driver's mobile to provide real time information



The agents proactively monitor deliveries & engage in encountered operational issues

- Help to assure the reliability of the delivery
- Can provide directions and feedback to all involved parties regarding the condition

# PERFORMANCE MONITORING

Enseval Visual Analytics has applied to combine business analysis, data exploring and data visualization for monitoring and reporting on key KPI



Enseval visual analytics provide a detailed tracking and tracing of process and its history

The visual analytics refine the warehouse operation by:

- Providing insight to support strategic and tactical decision based on data
- Producing more accurate and effective decisions
- Saving time for assessing performance against the target
- Enabling continuous improvement

## CONCLUSION

People, process, technology and environment are the key element for the success of Smart Warehouse Operation

The smart warehouse supported by technology implementation brings a significant amount of optimization to warehouse operation

- Higher productivity
- Higher efficiency
- Higher health, safety and security
- Higher accuracy
- Higher responsiveness



# THANK YOU