



DRIVING TOWARDS THE AUTOMOTIVE 4.0: OPPORTUNITIES AND CHALLENGES



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DHL SUPPLY CHAIN THAILAND CLUSTER



#DHL_AutoEvent





LEVERAGE TECHNOLOGY FOR THAILAND DOMESTIC TRANSPORTATION

Thailand Auto-mobility Discovery fair 2018
16th November 2018, Holiday Inn Pattaya

Speaker:

James Macleerie
Head of Transport
DHL Supply Chain Thailand Cluster



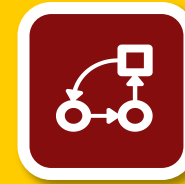
AGENDA



1

**TRANSPORT
MANAGEMENT
CENTER (TMC)**

2



**INNOVATION &
TECHNOLOGY**

3



**GREAT
RESULTS**

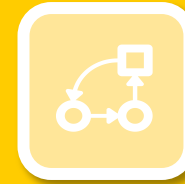
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**GREAT
RESULTS**



THAILAND OPERATIONS



WAREHOUSE

**CORE
SERVICES**

TRANSPORT



WAREHOUSE

WAREHOUSE
OPERATIONS
CAPACITY

70

LOCATIONS

650,000
SQUARE METERS

TOTAL SPACE

12,000++

HEAD COUNT

TRANSPORT
OPERATIONS
CAPACITY

DRIVERS

3,300

FLEET

4,176

VARIOUS FLEET TYPES SUIT
TO CUSTOMER'S NEEDS

40

LOCATIONS

6

SWITCH
POINTS

550k

TRIPS
/YEAR

1

TRANSPORT
TRAINING
SCHOOL

12

UPCOUNTRY
HUBS

1

TRANSPORT
MANAGEMENT
CENTRE

187MN

KILOMETERS
/YEAR

14

DRIVER
TRAINERS

TRANSPORT



AUTOMOTIVE

SECTOR

CUSTOMERS



PRODUCTS



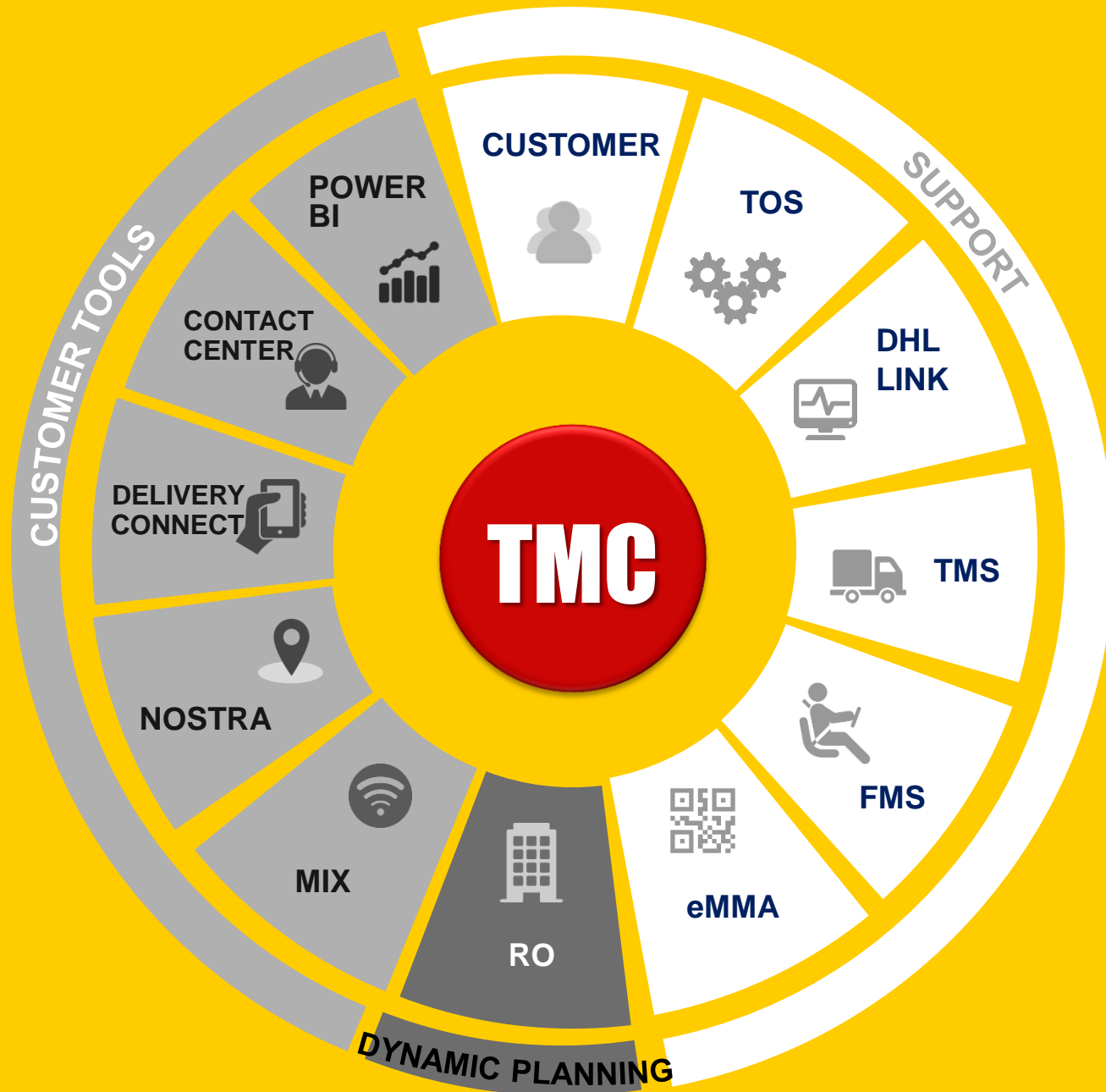
Auto parts



Tires



Finished vehicles

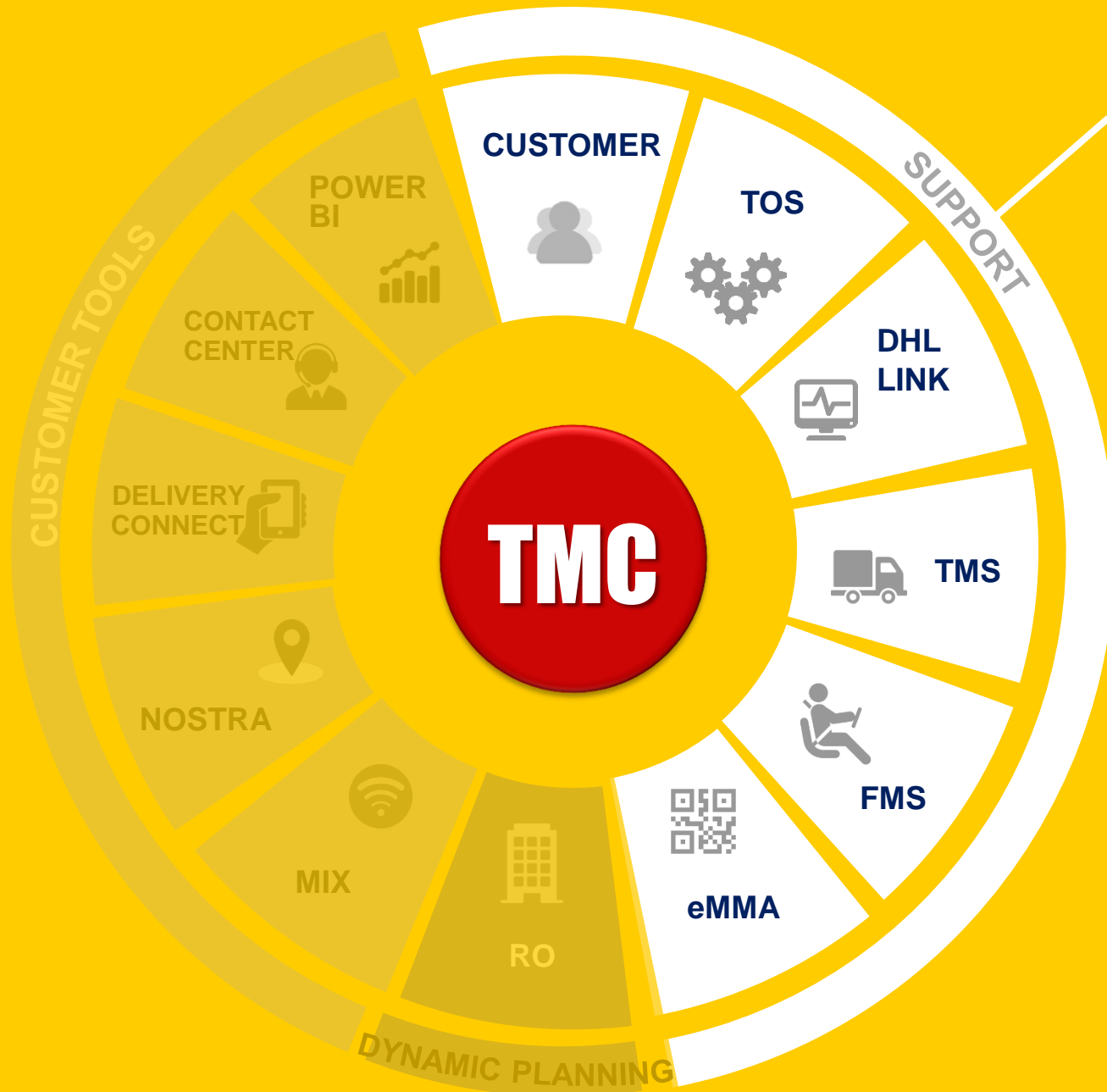


DHL TRANSPORT MANAGEMENT CENTER (TMC)

12 automated systems that creates the TMC

Our Transport Management Center provides customers with 24/7 track and tractability of vehicles and orders.

It enables us to monitor safety, compliance and provides real time planning ensuring the most optimized routes are achieved to provide excellent service to our customers.



SUPPORT

- Customer Interface
- Clean data
- Master data
- Data integrity
- Oracle billing/invoicing
- Drivers and Vehicle database
- Fleet Maintenance / Compliance
- Pre Trip inspections - live



Plan vs Actual



Real Time planning



Reduce Co2

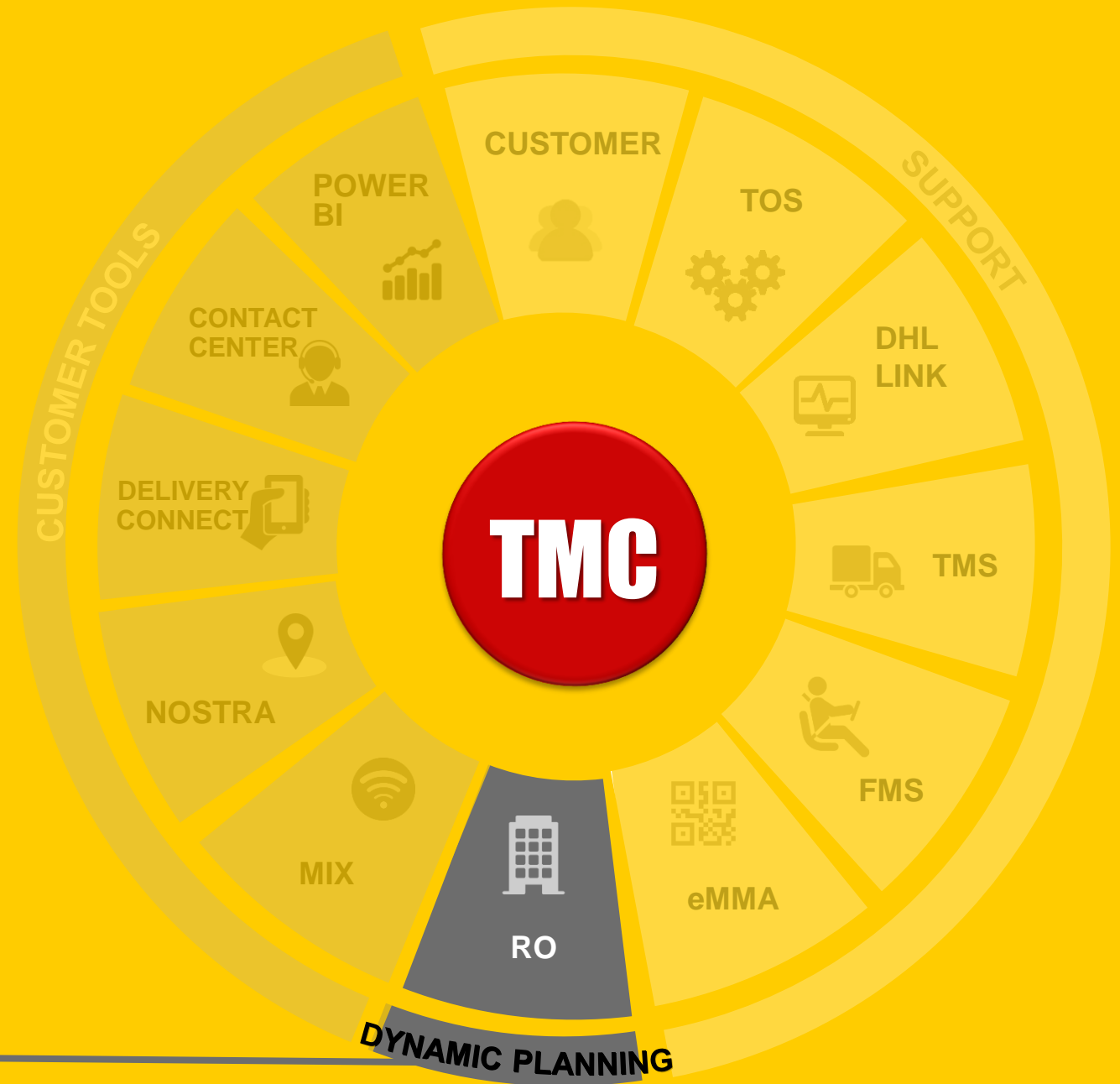


Reduce Cost



CUSTOMER
SERVICE

DYNAMIC PLANNING

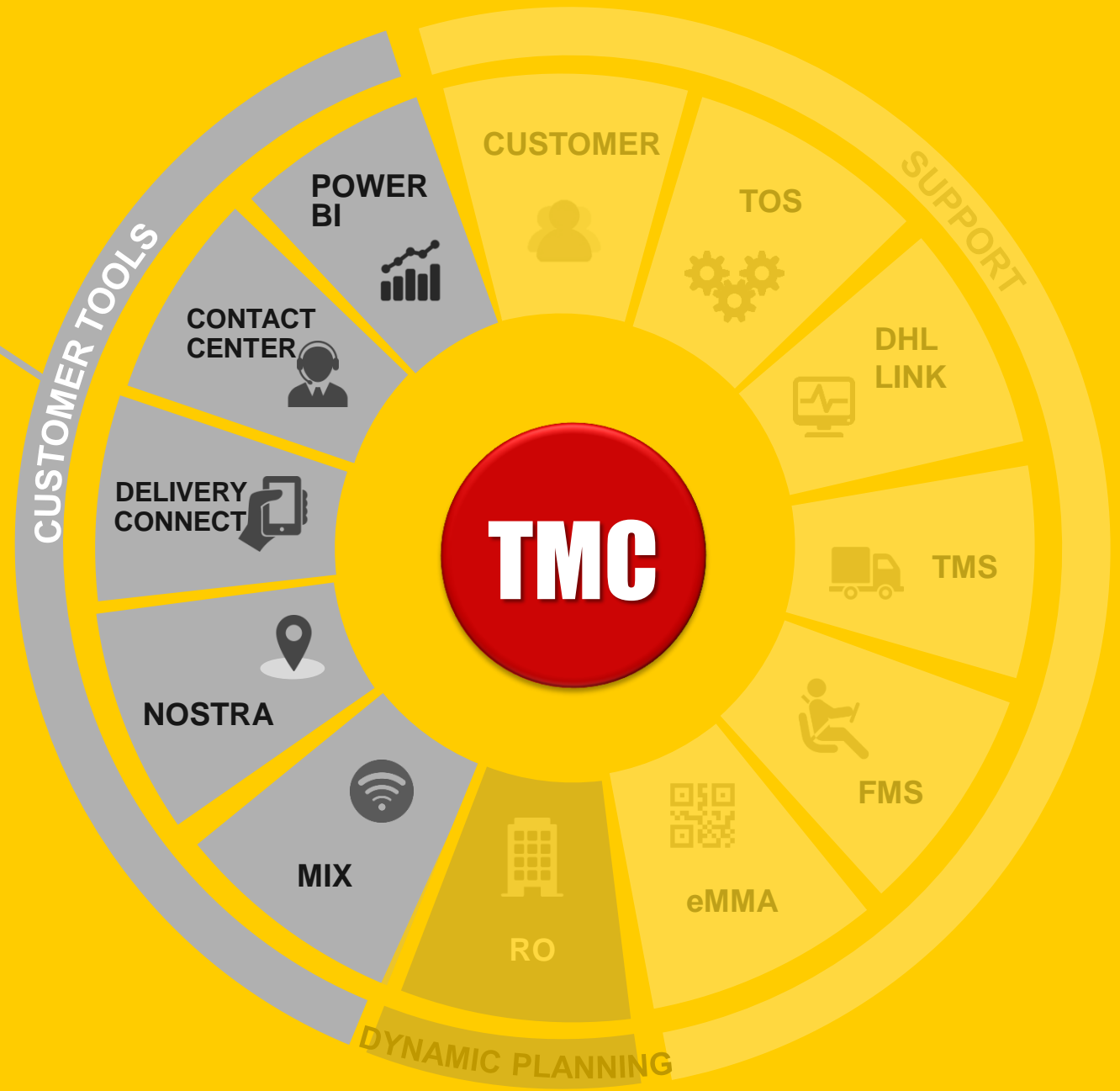


CUSTOMER TOOLS

Telematics

Connected View

Power BI



TELEMATICS

Telematics device records data and activities during the trip. (Installed in all DHL own fleet and some sub contractors fleet)

- Connecting +4000 vehicles
- Real time Safety alerts on driver & vehicle
- Improve Control
- National Network solution



will be detected and recorded by "Telematics" device

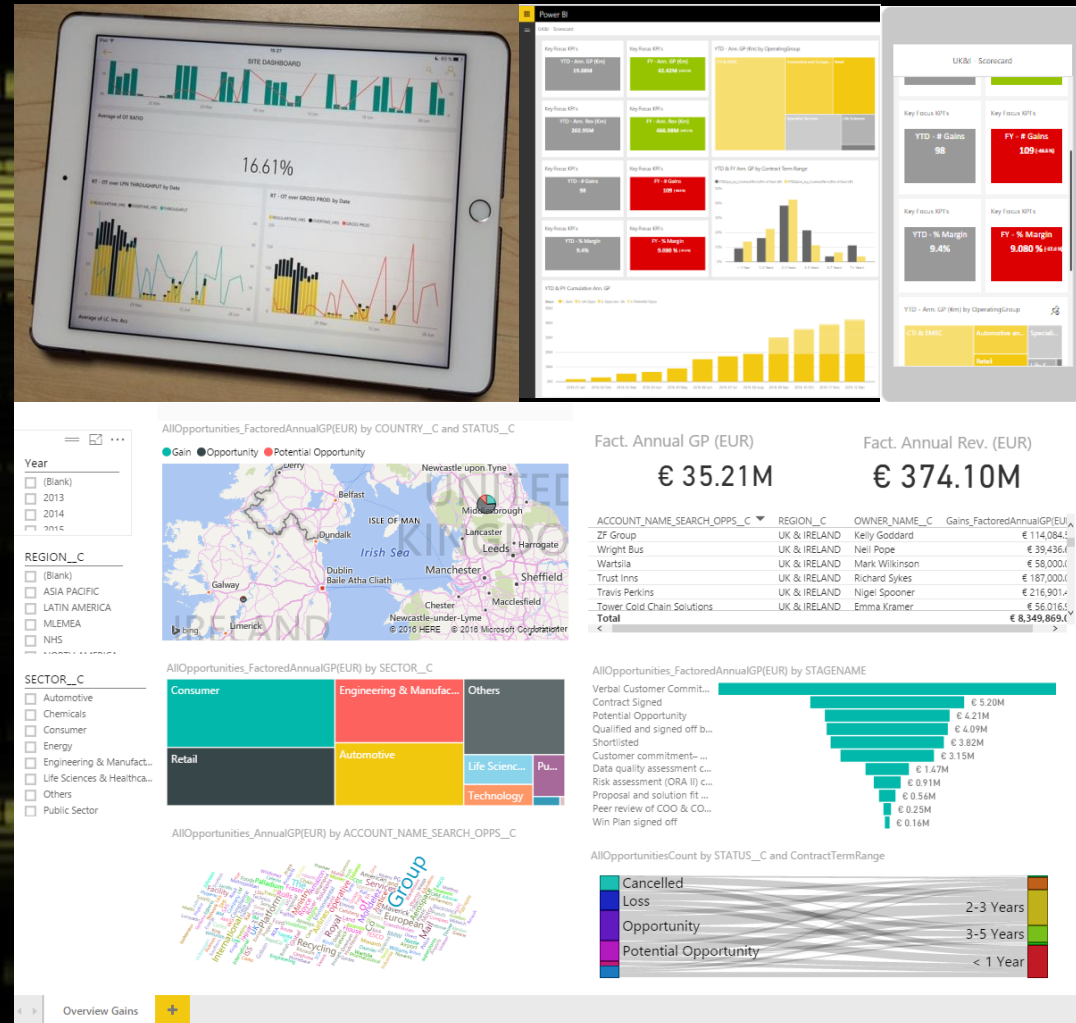
CONNECTED VIEW



A web-enabled system providing customers with full visibility of the operations within their DHL managed supply chain. Near real-time shipment, warehouse and inventory data visibility is available online – anytime, anywhere.

POWER BI

- Business information tool
- Visual analytics
- Mobile reporting
- Scheduled reporting
 - Labor
 - Operations
 - Finance
 - Sales
 - Start Ups
 - And much more....



SEAMLESS TRANSPORT TECHNOLOGY



TRANSPORT NETWORK



70
DHL
managed
locations

12
dedicated
Network
hubs

connected to
TMC

access to
more than
4,000
vehicles

FAST
supply chain

**CASE
PALLET
TRAILER**

RAIL
connectivity &
**CROSS
BORDER**

**E-FUL
FILL
MENT**

TRANSPORT MANAGEMENT CENTER

CUSTOMER BENEFITS

- Single point of contact
- Full visibility of Vehicle and Order status
- Automatic alerts via Geo Fencing
- Solution (What if?) Planning
- Demand Planning
- Compliance and Safety
- Cost efficient supply Chain
- Product and Brand care
- +4000 vehicles
- X Border Management
- Nationwide Fast Supply Chain



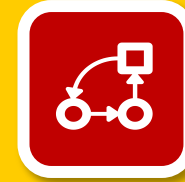
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GREAT
RESULTS

32 PALLET TRUCK

New vehicle with tail gate bridge which help increase the efficiency of loading/unloading time

THIS NEW DESIGN TRUCKS HAVE BEEN APPLIED IN DIFFERENT OPERATIONS ACROSS BUSINESS TO SUPPORT CUSTOMERS FROM VARIOUS SECTORS



What is the creativity?



TAIL GATE BRIDGE OR TRAILER LIFT

Allows drive-through loading and unloading without uncoupling the trailer. This also increases truck flexibility as both header and trailer can be unloaded in non dock locations.



ALLOW FOR BOTH SIDE & REAR LOADING/UNLOADING

Flexibility Capacity Innovation
Safety CO2 emission Fuel efficiency Cost saving
Utilization



INNOVATION AND TECHNOLOGY

GUARDIAN SYSTEM

Real-time Fatigue and distraction detection by detecting the eye blinking and head movement and voice alert in-cab to warn the driver using Satellite Communication



MOBILEYE

- Providing early warning alerts to driver on external activity
- Engine Management Connection



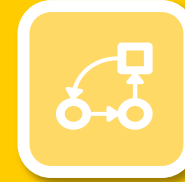
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**GREAT
RESULTS**

RESULT!

The integration
is improving the
business
incrementally

MAINTENANCE
REDUCED BY

5%

INSURANCE
REDUCED BY

3%

DRIVER
BEHAVIOR
IMPROVED BY

64%

COST
REDUCED BY

9%

ACCIDENT
REDUCED BY

48%

CO2
REDUCED BY

56%

FUEL COST
REDUCED BY

18%

IDLING
REDUCED BY

19%

COMPLIANCE
IMPROVED TO

99.8%

OFF ROUTE
REDUCED BY

5%



CERTIFICATE OF EXCELLENCE

2018

DHL SUPPLY CHAIN (THAILAND) LTD.

Thailand

In recognition of your company's commitment
to adopting *Green Road Freight practices* as a Carrier¹
GFA Label Leaf Level: FOUR



¹ Carrier: Company that owns commercial road vehicles for the transport of goods



Green Freight Asia Network Ltd.



Green Freight Asia Label partner

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2018 GREEN FREIGHT ASIA AWARD



DHL Supply Chain Thailand is **the FIRST**
organization in **Asia Pacific**
to receive **GFA Label Leaf 4 Award**

Q&A

