# **IPIC** 2017

Physical internet: challenges and opportunities for a 3PL.



## Pablo GOMEZ

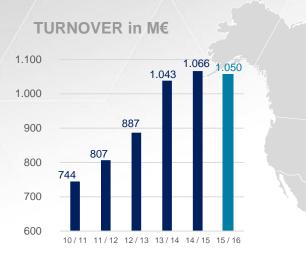
Head of Innovation FM Logistic Group & General Director FM Ibérica Vice Chair ALICE

> Environmental Engineer Master & Business Administration IESE



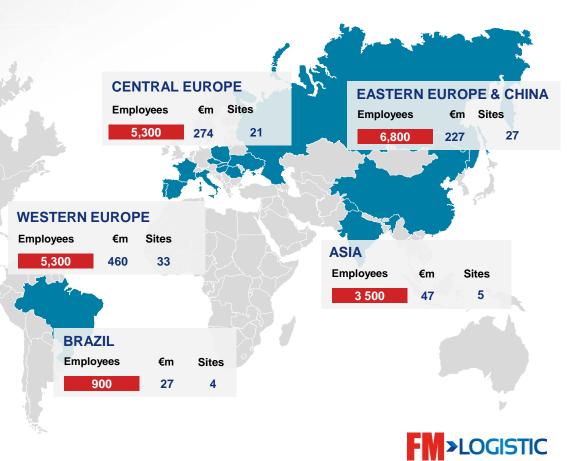


## **FM LOGISTIC**



**Revenue per business activity** 





## THE FOUR INDUSTRIAL REVOLUTIONS







## THE THREE REVOLUTIONS OF THE INFORMATION

-2000

-IÓOO



2000

1500

-3000

## THE THREE REVOLUTIONS OF THE INFORMATION

-2000

-IÚ00



2000

1500

-3000

## THE THREE REVOLUTIONS OF THE INFORMATION

-2000

-IÓ00



2000

**I500** 

-3000

THE 6 MASS EXTINCTIONS





## FRAMEWORK

- Unpredictable and rapid consequences at the social level.
- Creation of world dominating companies
- The contact technology in the hands of A.A.F.A
- Europe lack of business references
- Free investment strategy versus investment strategy
- Scarce resource economy
- Mobility change

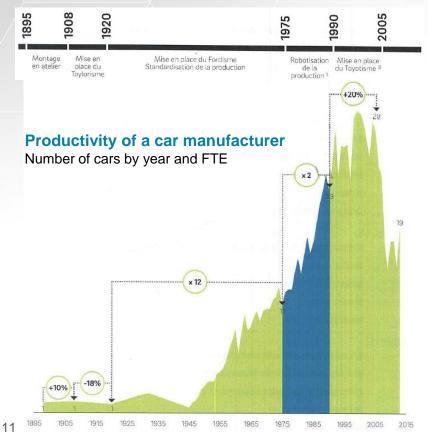


## STRATEGY ASSET LIGHT/ ASSET ENGAGED





## THE IMPACT OF LOGISTICS IN JOBS



## 7 lessons from the automation of the automotive industry from 1975 to 1990

| Deloitte Consulting |   | >LOGISTIC |
|---------------------|---|-----------|
| 7                   | Export.<br>(Exported volumes)                             | +50%      |
| 6                   | Accessibility of the offer.<br>(Households with vehicles) | +10pts    |
| 5                   | Relative production cost.                                 | -2pts     |
| 4                   | Safety at work.<br>(Work accident)                        | ÷5        |
| 3                   | Wages.<br>(Average salary)                                | +35%      |
| 2                   | Qualification Jobs<br>(frames)                            | +45%      |
| 1                   | Productivity<br>(between 1975 and 1990)                   | x2        |
|                     |   |           |

Source: Deloitte Consulting

THE MOBILITY CHANGE

**95%** CAPACITY UNUSED



NEW MODELS OF CAR SHARING NEW

RESTRICTIONS IN CITIES

And... Asking our youngsters to make an extra effort to obtain a driving license!!



## THE AIR OCCUPANCY

Security

Drones

Dirigibles



Amazon patent stores air



## SO, THE NEW WORLD OF LOGISTICS .... IT IS A WORLD FULL OF OPPORTUNITIES



With physical internet, logistics and transport become a network. Therefore a challenge for 3PL is:



Specialized in network businesses



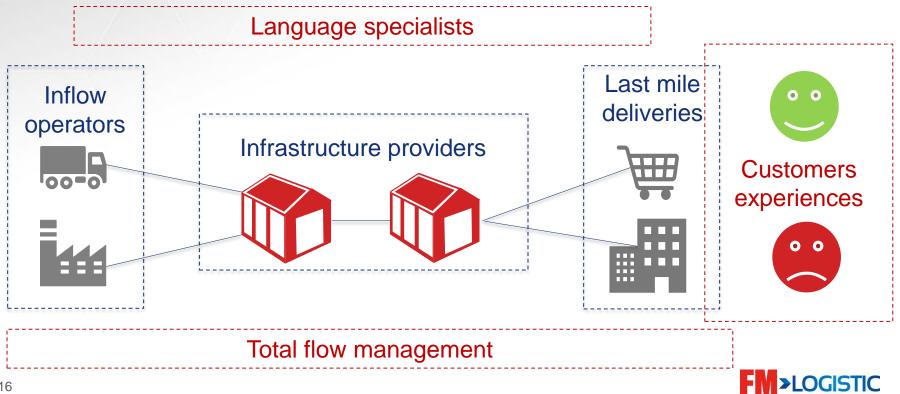
Need of interoperability



Be reorganized as part of the solution

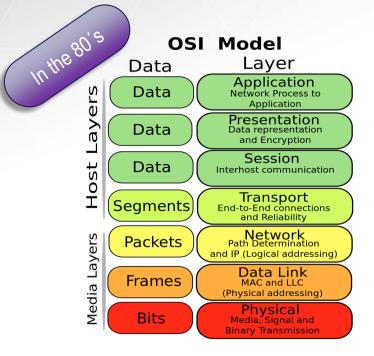


## SPECIALIZE IN NETWORK BUSINESSES

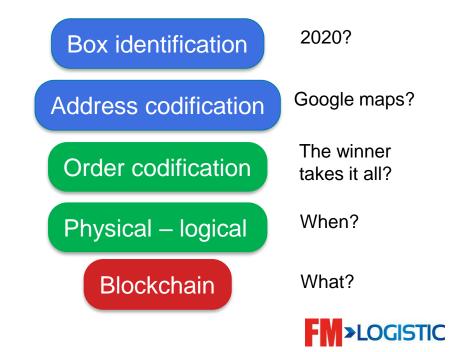


## NEED TO INTEROPERATE

### INTERNET LANGUAGE



### PHYSICAL INTERNET LANGUAGE



## MOBILITY LOGISTICS IS NOT THE PROBLEM

## CONTAMINANT GAS: 51% of NOx emissions come from road traffic

#### MADRID MOBILITY

| Type of vehicle    | Routes |
|--------------------|--------|
| Cars               | 81,2%  |
| Light distribution | 7,7%   |
| Heavy distribution | 1,7%   |
| Bus                | 1,7%   |
| Moto               | 2,7%   |
| Taxi               | 4,9%   |

#### MAIN MOBILITY PROBLEMS IN MADRID. EXPERT COMMISSION

Driving indiscipline.

A network of pedestrian routes is missing Loading and unloading lack regulation High use of the car.

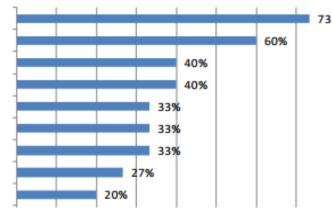
Lack of scheduling coordination.

Lack of Campaigns for sustainable mobility

Loading and unloading indiscipline

Lack of parking area

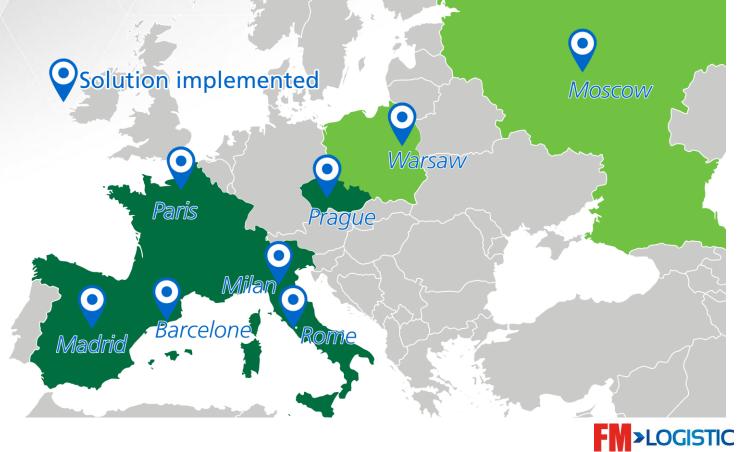
Lack of public transport for metropolitan area



## ... IS PART OF THE SOLUTION!



## CITYLOGIN



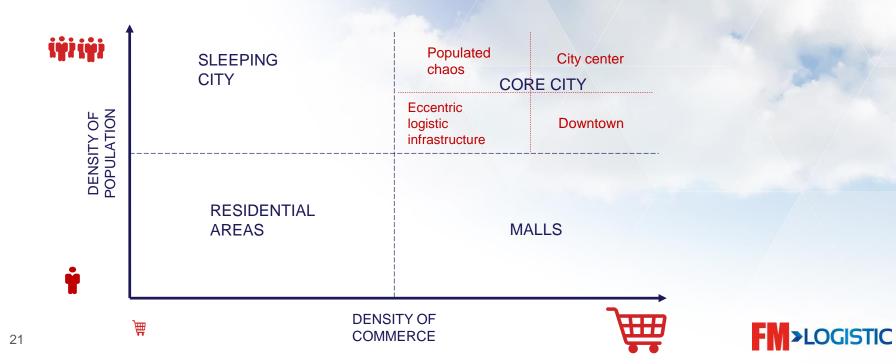


### INNOVATION LABORATORY FOR SUSTAINABLE CITYLOGISTICS



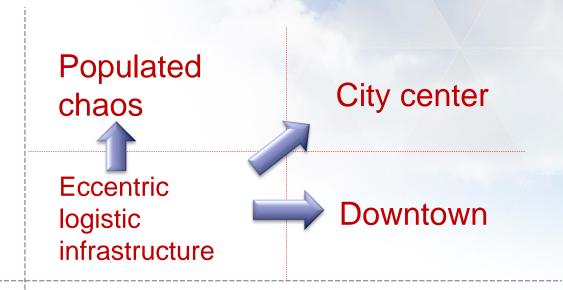
## LIMITATION ON SPACE / TIME

Cities-> new models, private-public



## LIMITATION ON SPACE / TIME

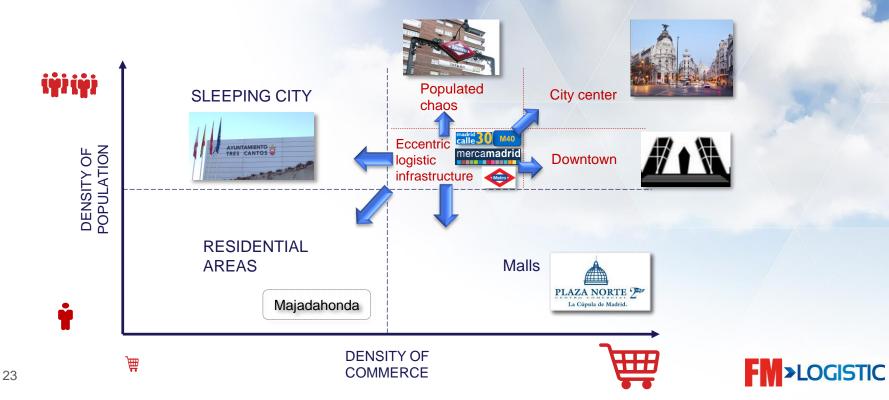
Cities-> new models, private-public





## LIMITATION ON SPACE / TIME

Cities-> new models, private-public



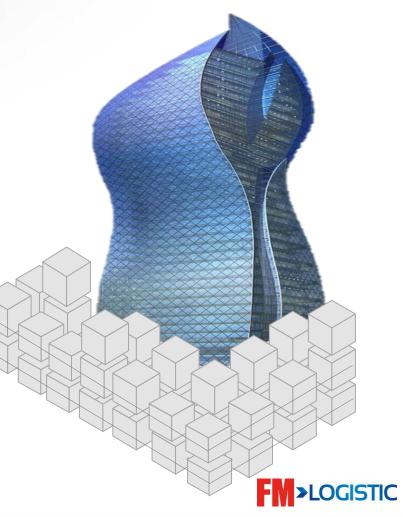
## TECHNOLOGY









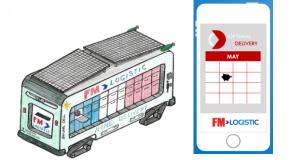


## **OPEN INNOVATION**





STARTUPS



FASTER MIND CHALLENGE



**INNOVATION CLUB** 



## THANK YOU

