## Capture New Business Opportunities with Real-Time Technology



*Speaker*: Daniele Benedetti Applicative Architectures, Integration and Innovation

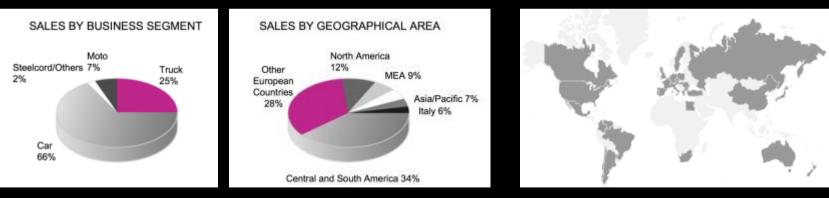
### Pirelli

WE CHANGE THE DRIVING EXPERIENCE BY CONSTANTLY CHALLENGING THE BOUNDARIES OF TYRE TECHNOLOGY, STYLE AND SUSTAINABILITY, SETTING TRENDS IN COMMUNITIES ACROSS THE WORLD



# **Company Profile**

Founded in 1872, Pirelli is the fifth biggest tire maker in the world in terms of sales. Present in over 160 countries, today it has 22 tire production facilities located on four continents and counts about 37,000 employees. estimated its value at €2.27 billion.



2012 sales

Direct presence in the world

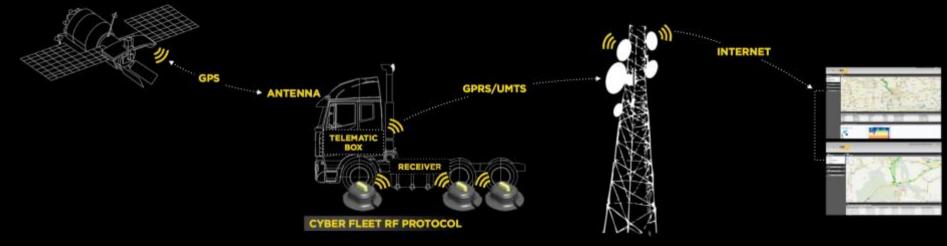
# SAP HANA AT PIRELLI TODAY

SAP HANA as sidecar accelerator for ECC 6.0 to run custom and standard reporting:

- Sales & Distribution (SD) custom reporting
- Controlling-Profitability Analysis (CO/PA) reporting
- Supply Chain and Sales custom reports

### **CYBER FLEET - OVERVIEW**

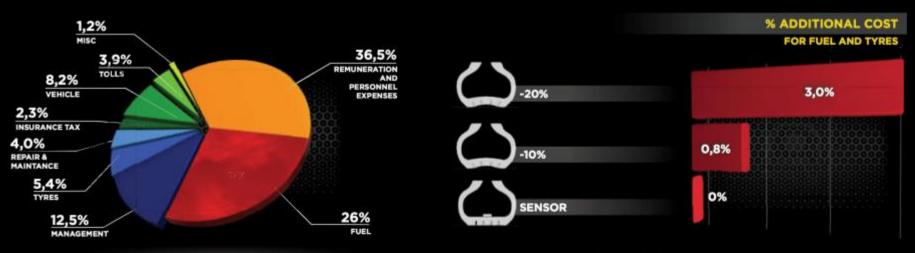
#### **DYNAMIC SOLUTION SYSTEM ARCHITECTURE**



### WHERE DOES IT HELP?

#### MAIN VALUE PROPOSITION

**GAP VS RECOMMENDED TYRE PRESSURE** 



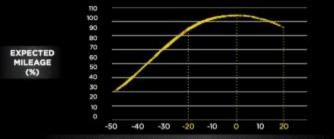
ESTIMATION BASED ON TRUCK + TRAILER 31TT 120.000 KM/YEAR - COST OF FUEL:  $\in$  1,25 + VAT

#### MILEAGE INFLATED PRESSURE IMPACT ON TYRE LIFE

#### MILEAGE INFLATED PRESSURE IMPACT ON TYRE LIFE

WHEN THE INFLATION PRESSURE OF THE TYRE IS EITHER TOO HIGH OR TOO LOW, THE CONTACT PRESSURE DISTRIBUTION BETWEEN THE CENTRE AND THE SHOULDER AREAS OF THE FOOTPRINT AREA WILL NOT BE UNIFORM (AS SHOWN IN THE GRAPH)

#### THE RESULT IS AN ACCELERATED AND IRREGULAR WEAR



% OF VARIATION REFERRING TO THE RECOMMENDED INFLATION PRESSURE



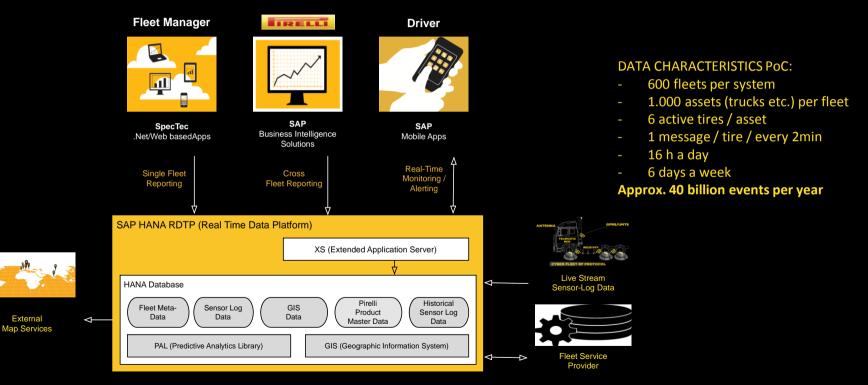
#### **OVER-INFLATION**

REDUCED GRIP -> LESS SAFETY LOCALISED TREAD WEAR IN THE CENTRAL AREA

### **EFFICIENCY LEVELS**

							CTD)	11102	
	EFFICIENCY			BRA		GERM		Add. Tyre Cost	
VEHICLE ANNU					FUEL COST (	.€/I] 0.8	FUEL COST	r[€/l] 1.6	
VEHICLE ANN	120.000 Km	LEVE	Pressure LS underinflated [%]	Add. Fuel Cons [%]	Add. Fuel Cost per year [< 2.5 km/l]	Add. Fuel Cost per year [> 3.5 km/l]	Add. Fuel Cost per year [< 2.5 km/l]	Add. Fuel Cost per year [> 3.5 km/l]	Mileage Reduction %
		A		-		-	-		-
		в		0,15%	€72	€ 41	€144	€ 82	
VEHICLE FUEL CO	ONSUMPTION	c	-5%	0,30%	€ 144	€ 82	€ 288	€ 165	
TRACTOR + TRAILER		D		0,55%	€ 264	€ 151	€ 528	€ 302	
ONLY TRACTOR / BUS	S 3.0 - 4.0 Km/l	E	-10%	1,00%	€ 480	C.€ 274	€ 960	€ 549	-3%
		F		1,81%	€ 870	€ 497	€ 1740	€ 994	
		G	-20%	3,00%	€ 1440	€ 823	€ 2880	€ 1646	-20%
							JNDER-INFLATED		
LE	Unde		dd. Fuel Ad Cons %	ld. Fuel Cost per year	Add Fuel Cost per year	Add Fuel Cost per year	Add Fue Cost per year		
Е	-10 9	2/ 1	00 % €	480	€ 274	€ 960	€ 549	-3%	

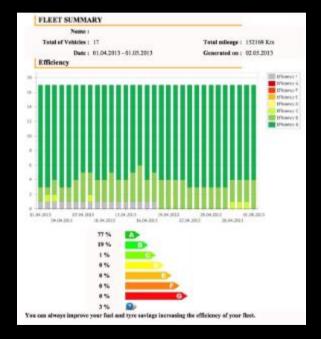
### **TARGET ARCHITECTURE V 2.0**



#### **FLEET MANAGER - SINGLE FLEET REPORTING**

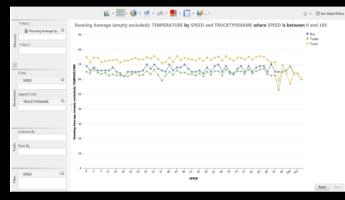
	General Fleet Status										
	Vehicle / Fleet Number	Efficiency	Warning	Timestamp	Ignition						
	Truck 1 / 13534	3		17.04.2013 08:45:02							
Home	Truck 2 / 542	<b>3</b>		16.04.2013 10:59:50	£300						
Nome	Truck 3 / 25	<b>3</b>		17.04.2013 13:47:33	£						
	Truck 4 / 341613			30.04.2013 21:56:56							
rack and Trace	Truck 5 / 2355	<b>A</b>	-	15.04.2013 18:53:47	E.m						
ystem Settings	Truck 6 / 546			30.04.2013 21:23:29	£300						
	Truck 7 / 154		+	16.04.2013 14:07:55	£						
Administration	Truck 8 / 876	B	<u>+</u>	30.04.2013 19:18:20	£						
	Truck 9 / 24315		+	12.04.2013 11:24:58	£						
Vehicle Management	Truck 10 / 346	B	<u> </u>	30.04.2013 22:00:54	<b>6</b> ~						
hicles	Showing 1 - 10 of 17 items		Show 10 🗸 i	tems	4 <						
hicle Models	Total mileage overview Top 10 True		Efficency over	rview today 17 Vehicle 24 Open Is:							
Tire Management	Total Inneage overview Top To Tita		Encency over	view today in vehicle 24 Open is	5005						
Issues	Truck 4-	143377 Km									
	Truck 5-	1264 Km	13 🔊								
Report	Truck 8-	5 Km	4 13	9 Low Pres	ssure						
	Truck 9-	Km									
Logout	Truck 6-68304	Ken	0 🦲	0 Fast Defi	atlan						
ogout	Truck 10 - 64008 K		0 💷	0 Past Den	ation						
	Truck 11 - 61259 Kr		0	0 Max. Ten	nooratura						
	Truck 3-59870 Km		0	0 max. 100	aportaciario -						
	Truck 1- 56285 Km		0								
	Truck 2-46794 Km			15 Missing	Sensor						
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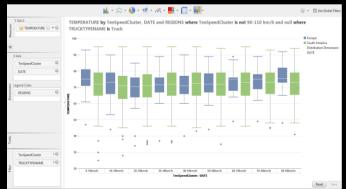


## **PIRELLI - CROSS FLEET REPORTING**

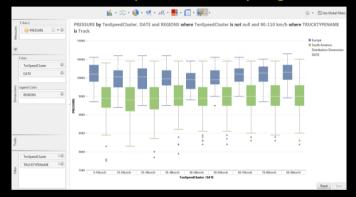
#### Temperature / Speed by Truck Type



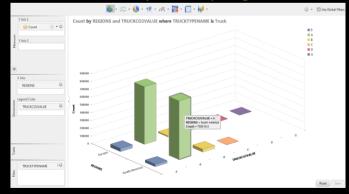
#### Temperature / Speed-Cluster by Region



#### Pressure/ Speed-Cluster by Region

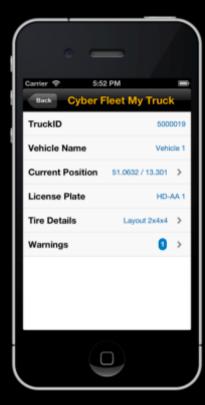


#### Efficiency Class by Region



### **DRIVER - MOBILE APP**









# **SUMMARY**

- Transforming tires into an active "thing"
- Tire management as new business services offered from Pirelli for fleets to...
  - Optimize usage and live-time of tires
  - Leverage predictive analytics to create new fleet services
- New insights into product quality and performance in correlation to street conditions, climate, local practices etc. for fleet and Pirelli.