Impact of remote measurement in reducing logistics costs

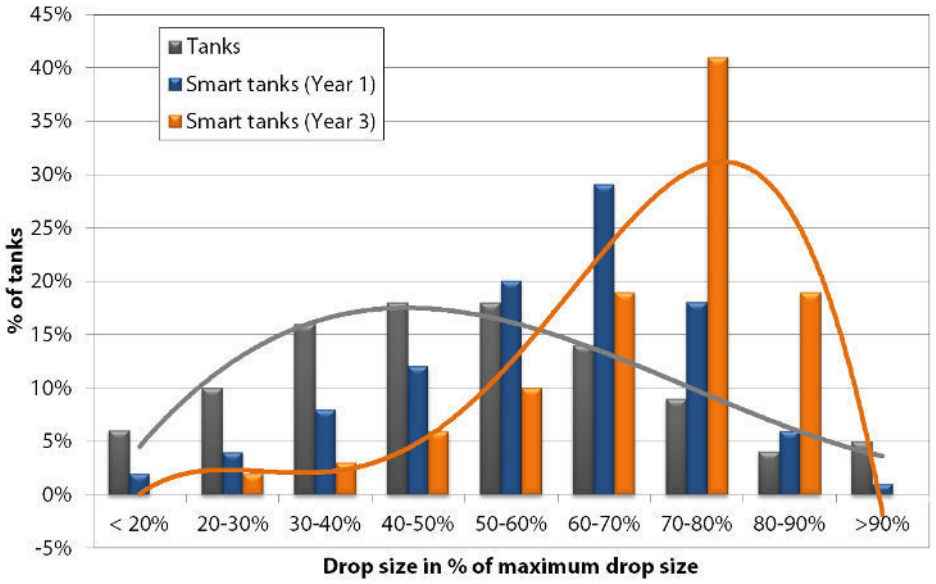
OBJECTIVES

- **Determine the financial benefit** obtained through savings in distribution logistics costs compared with the operating costs of a remote measurement system used on the tanks of a hydrocarbon distributor's customers.
- **Factual help in deciding** whether or not to equip each tank (go / no go).
- **Estimate of additional savings** achievable on a partially equipped number of tanks.

EXAMPLE

- Logistics zones analysed: *Confidential*
- Number of tanks: 166,000, of which 1% are equipped with remote measurement systems
- Number of deliveries per year: 330,000
- Initial use of a remote gauging system: 2007

RESULTS



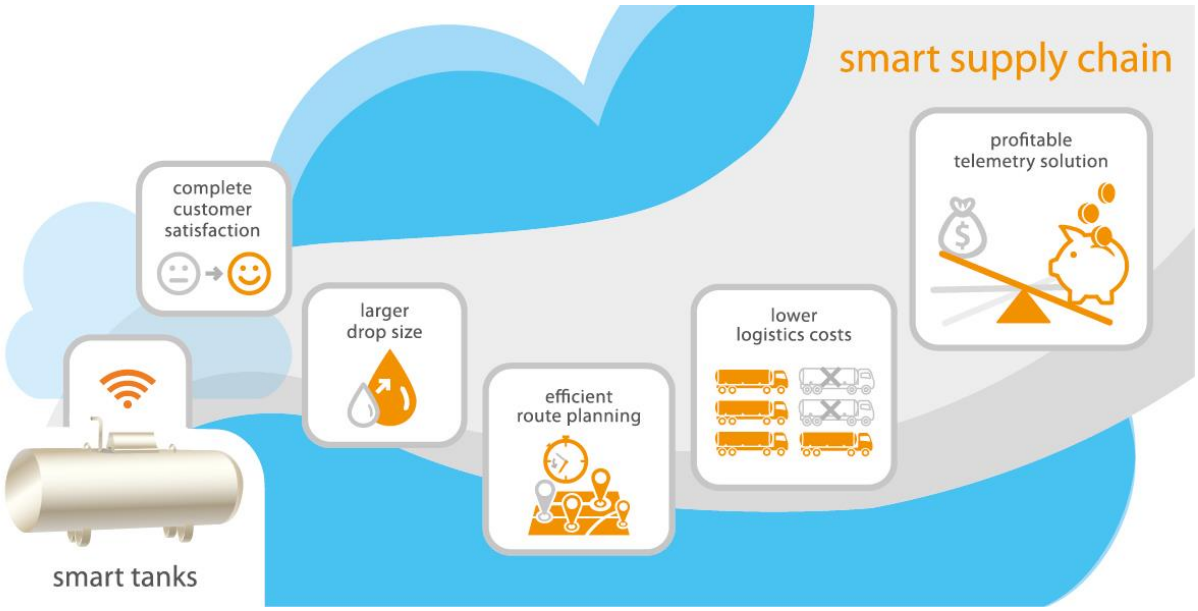
- Telemetry information is often underused.
- Logistical savings of up to 15% are possible.
- **3 scenarios are proposed, offering savings of between €0.9m and €1.4m per year**, depending on the number of telemetry units to be deployed and the pre-fill gauge target.

Current performance	With remote measurement
No. of deliveries	-25%
Number of carriers	-10%
€/T or litre delivered	-15%
Average unit delivery	+35%
Customer satisfaction	>95%

ACTION

- The operation is based on an analysis of the history of all deliveries made over the last 3 years, on knowledge of the capacity of the tank(s) at each delivery location, and on the average unit cost of a delivery.
- 2 databases (DB) must be created

Databases	Delivery points (PTL)	Deliveries (most recent 3-year period possible)
Required data	a unique code for each PTL the capacity of the tank (or tanks where there are twin tanks), whether or not the PTL is already telemetered	The **same** delivery location (PTL) code (used to connect the 2 DBs) The delivery date The quantity delivered
Optional data	The type of PTL order: as ordered by the customer, forecast, telemetered, online order, other types of order PTL with significant penalties in the event of a stock-out Highly seasonal PTL, such as maximum consumption for a few weeks, then nothing more	Gauge before delivery Gauge after delivery

DELIVERABLES

- Segmentation of unit delivery performance by:
  - order type,
  - tank capacity,
  - geographical sector / logistics zone,
  - customer business sector.