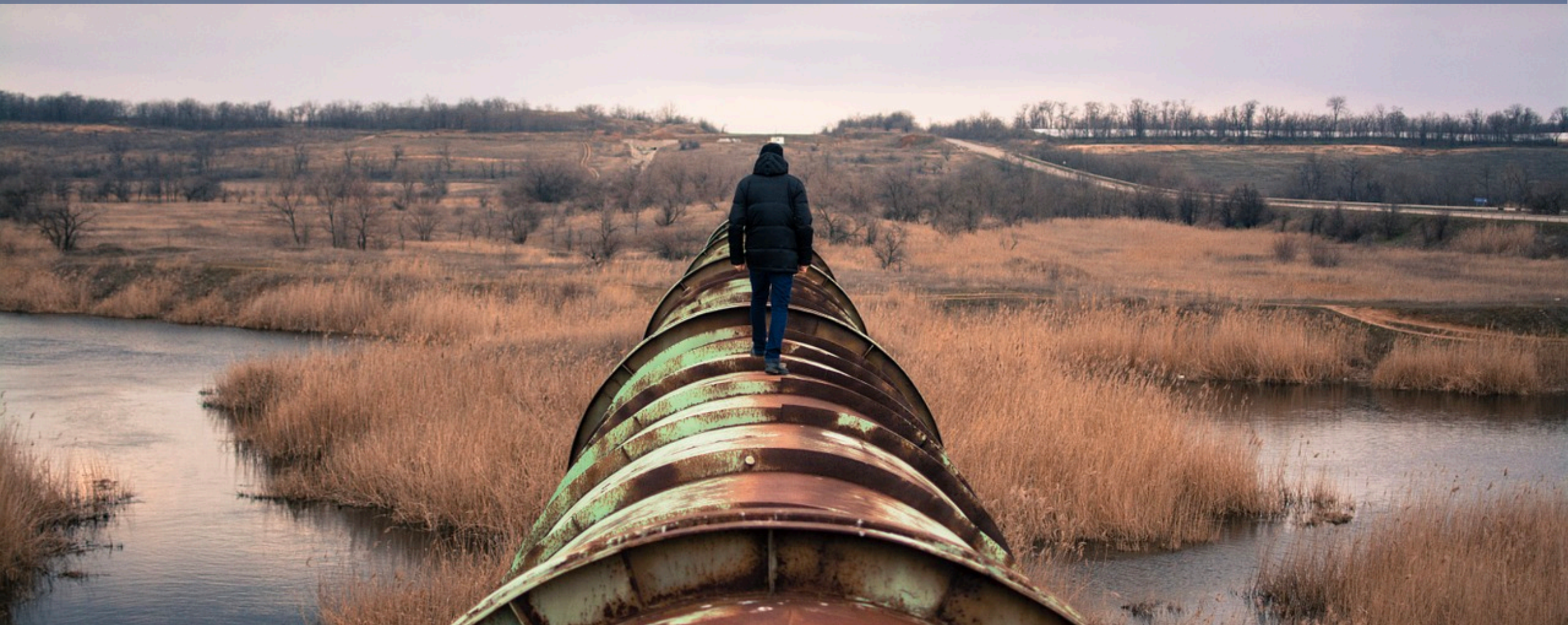



Dynamic Pricing Model in Petrochemicals



Dynamic pricing model in petrochemicals

 Detailed in supporting pages

Context

- The **leading petrochemical producer** (polymers and monomers portfolio) in Europe
- Domestic market has significant **polymer demand** from plastics industry
- Our focus was on their **polymer portfolio** (26 grades in LDPE, HDPE, PP and PVC); fully commoditized products
- Client's market share:
 - **LDPE: ~50%**
 - **In other products: <10%**
- **Fierce competition** in polymers market, with main competition from Uzbekistan, Iran, US, Europe
- Client has very **basic target prices mechanism**
- Historically, **no incentive system in place** for sales team

What McKinsey did

- Designed a **dynamic pricing model**, coupled with an incentive-based **performance system**

Dynamic pricing model

- For each product group
 - Defined **ICIS¹ index based target prices**, based on relevant import markets and product features
 - **Differentiated** target for each grade, using past data (cost, strategic preference, etc.)
- **Applied customer and order size based segmentation** to grades with bigger volumes
- **Set allowed minimum prices** as well to prevent value leakage, by each grade and sales representative

Petkim inventory tracking model

- Designed an **inventory tracking model**
- Developed minimum price exception rules based on inventory levels

Performance (bonus) system

- Developed **target-based bonus system** for sales team, allowing up to 50% variable pay

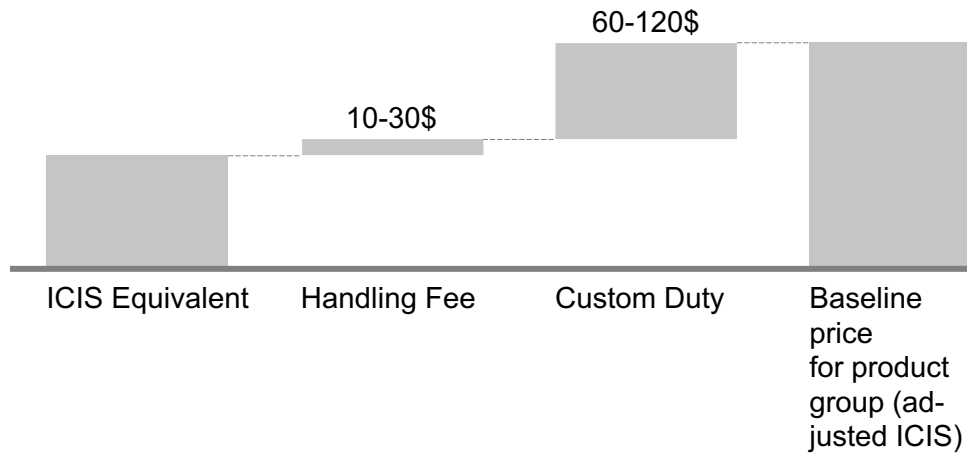
Impact

- Dynamic pricing model **pilot ongoing** for 3 months, with **USD >1.5mn impact in 2 months (2% of revenues)** in scope)
- Achieved **significant mindset shift** in sales team towards performance oriented culture
- Developed **tracking tools to increase transparency** and facilitate coaching by sales team managers
- **Removed "myths"**, e.g., continuous concern on inventory levels with no fact basis

¹ Globally well-known chemical/energy commodities pricing intelligence company

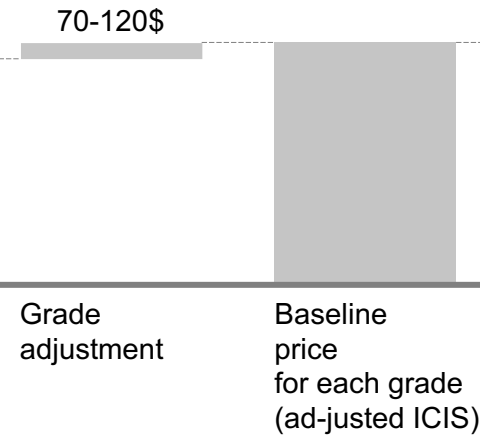
We designed 3-level dynamic pricing level setting methodology for our client

Setting the pricing baseline for product groups on market conditions



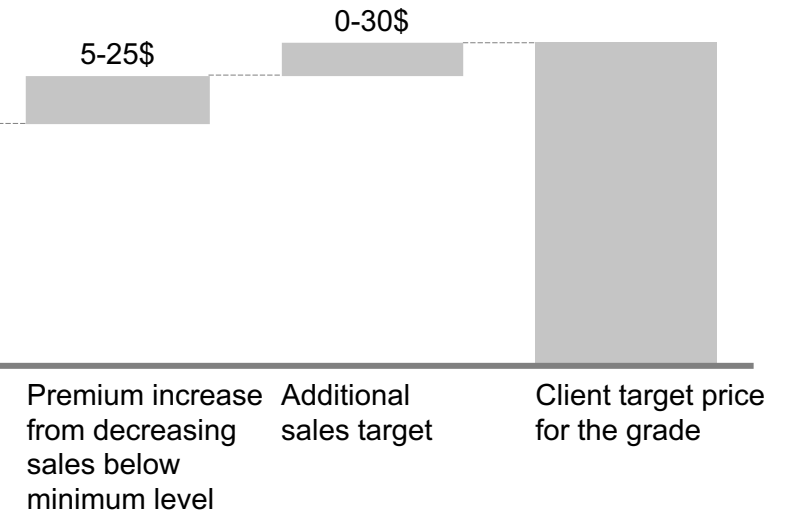
- For each product group, ICIS equivalent prices are defined based on **import countries to europe and product features**
- Baseline price for each product group** (i.e., LDPE, HDPE, PVC, PP) is calculated by **adjusting ICIS equivalent low price for product group**
- Previous year sales data for each grade** is used to finalize baseline prices

Differentiating prices by product grade



- Among each product group, **each grade will be differentiated** considering
 - Cost
 - Strategic preferences
 - Turkey market premium)

Differentiating prices by per customer revenue / order size segments and setting targets

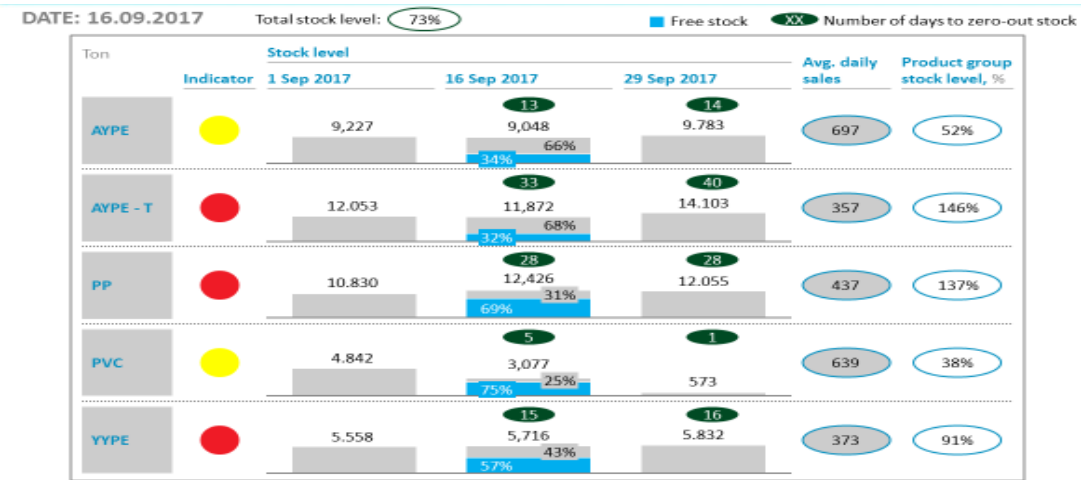


- For each grade, **minimum allowed Client sales prices** were set by calculating worst 25 percentile of sales based on ICIS premium gaps from previous year data (idea is to cancel worst 25 quartile or shifting lower price sales to minimum level)
- Additional sales targets** were added by sector expertise of McKinsey, Sales EVP and Sales Managers
- Customer size** in terms of revenues to Client and **order size based segmentation**

We designed an inventory tracking system and integrated it with the dynamic pricing model via a sales authority matrix

How did we design inventory tracking system?

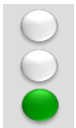
- **Past, current and future stock level estimates** (by integrating production plan) are added to interpret stock levels
- **Market trends** (increasing, decreasing, stable) are also **considered in optimum inventory levels**
- **Warning indicators** (red, yellow, green) are formulated to **show critical stock levels** that requires action



How did we integrate it with performance system?

- **A sales authority matrix** working with **different minimum price levels** for each grade is designed
- Sales reps **can only sell below set minimum price levels** with Sales EVP / sales manager approval (or information), depending on authority matrix indicators
- **Authorized person for approval** views the **customer information** and **current situation of inventory level** via dashboard and approves/denies price decreases below set minimum levels

Stock level

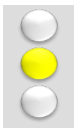


Approval

- Sales EVP

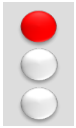
Information

- -



- Sales Manager

- Sales EVP



- -

- Sales EVP
- Sales Manager

Pricing team



Eren Cetinkaya
AP



Demet Harac
AP



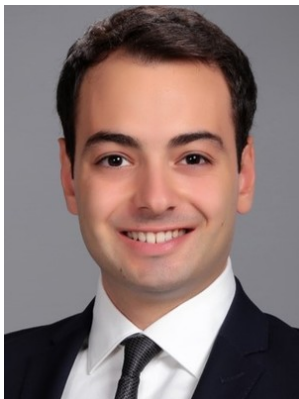
Burak Ozdamar
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