

# Truck Tire Competitor Pricing Intelligence project

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## Introduction

Continental's pricing team is responsible for the design, implementation, and reinforcement of pricing strategy in the US market, for all product areas. Competitor pricing intel is crucial part of remaining competitive in marketplace, but ALL information is via sales team or sources in market. Intel comes in various formats / means: emails, excel files, K2 workflow, and, on occasion, pictures/screen shots. In 2022, 15,000 competitor data points were collected.

The current database & process are very manual and due to lack of ample capacity, there is no end-to-end process with regular recommendations on pricing adjustments based on market sensing. Therefore, a single source for gathering and processing data, gaining insights, and making recommendations on adjustments to our pricing is missing and is necessary for the future.

## Main Target Proposal

Develop an efficient process and system by which the pricing team incorporates, processes, and analyzes, and creates pricing recommendations in a systematic way to maximize our competitive position in the market. "Market sensing" that is efficient, agile, and robust.

## Scope

- › New and Retread products – in the future incorporate Digital Solutions competitor information.
- › For new TT tires - RE & OE data. For Retread – RE only.
- › Competitor intel on Service Pricing (standardized National Account pricing for mechanical services performed for fleets)
- › Mechanism (database) creation and maintenance. Addition, deletion, and adjustment of database with changes in the market (new competitor marketing lines and products, potential addition/deletion of criteria).
- › Dashboard with analytics coming from intel gathered.
- › Regularly scheduled (eventually monthly) recommendations coming from Pricing team on adjustments to price based on intel gathering.
- › Integration of following data sources:

- › K2 inputs + excel price sheets (~60% - 80%)
- › Manual inputs

Photos/png files, pdf files, emails.

### **Out of scope**

- › Information on dealer marketing programs
- › Data coming from text messages
- › Additional data sources (e.g. Torqata)
- › CST
- › PLT

### Stakeholder Expectation

- › Efficient, reliable, robust
- › Secure & compliant data
- › Inclusion of data from CRM (later phase)
  - › Investigation of sources of internal data

### Boundary Conditions

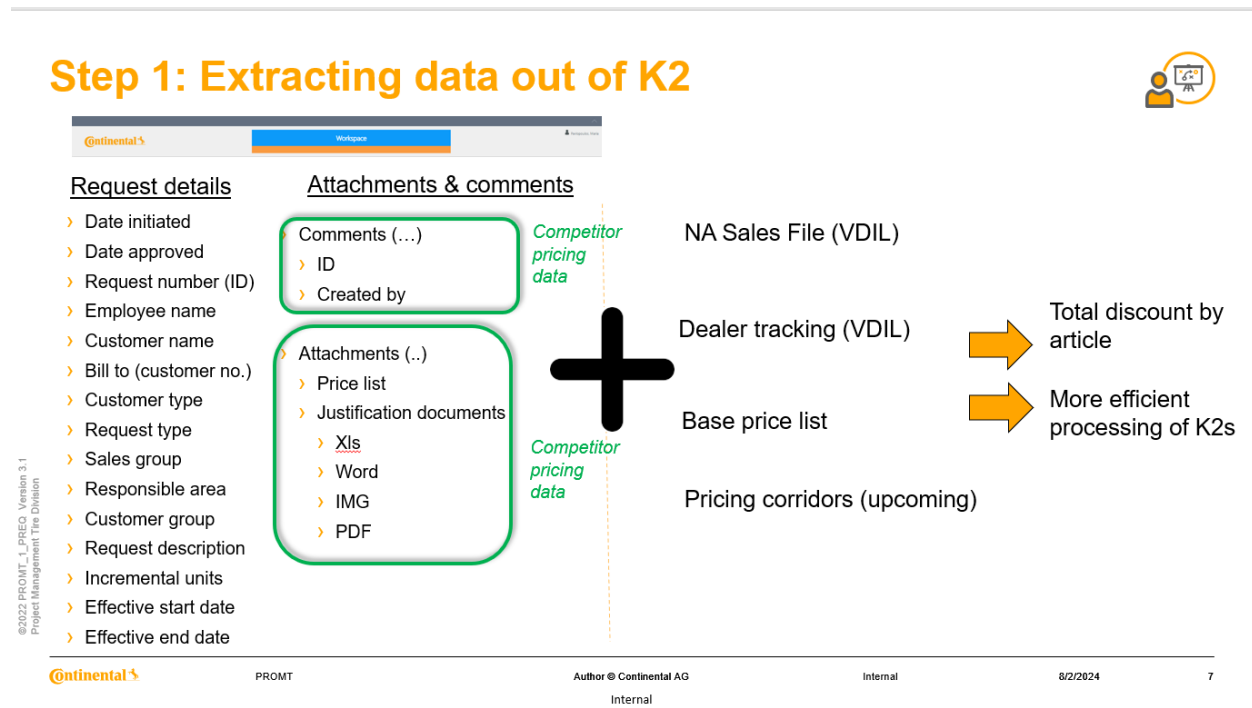
- › Ability to extract data out of K2
- › Use of K2 template from sales force
- › Extension of data platform to handle additional external sources
- › Ability to 'qualify' incoming data:
  - › Which channels, axle positions, applications, segments, vocations
  - › Invoice vs. Net

## Benefits

- › Optimization of intelligence from various sources
- › Speed to making recommendations on price adjustments
- › Full transparency of competitor pricing from field and back to field

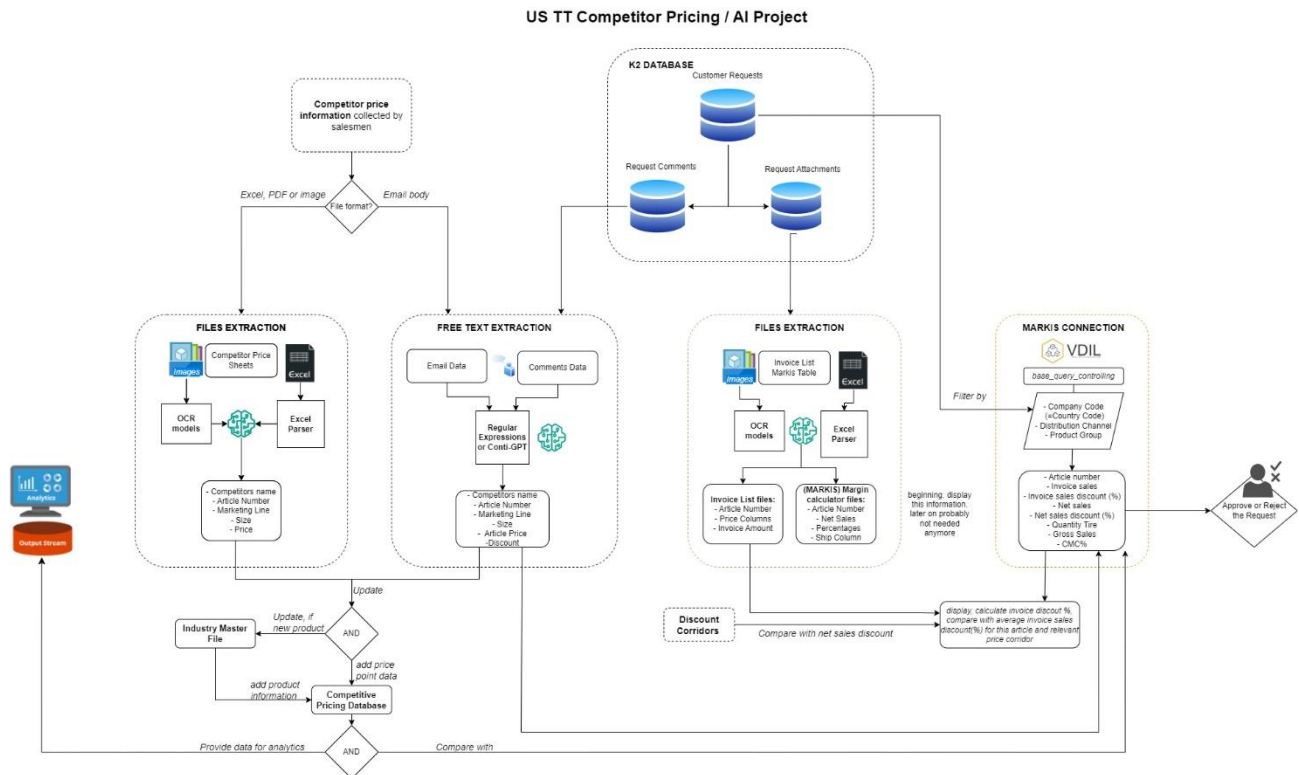
## Interfaces / Dependencies to Other Projects

- › K2 data extraction (Dubro's team)
- › Rollout and use of K2 template (will gather competitor info in more organized way)
- › One Price List project completion
- › CRM / Salesforce



# Data Sources and Data Flow

The following figure shows the conceptual design with data sources and data flows.



## K2 Database

The K2 database stores all the customer requests created by the sales force and aggregates comments and attachments to these requests. Data can come in various formats / means: emails, excel files, K2 workflow, and, on occasion, pictures/screen shots. In 2022, 15,000 competitor data points were collected.

ntnal-1/bgeA-k2dataset, please request access to it.

## Files and image extraction

Python Scripts can extract the needed information out of images as well as Excel Files. The images can either be an Invoice List table or a table with Markis information.

## MARKIS Connection

MARKIS is an application for Analysis of Actual Sales, Forecast / Budget Sales figures derived from SAP ERP and Cosimo (Budget/Forecast). Virtual Data Integration Layer (VDIL) is Continental's platform that provides interfaces for direct data access with a variety of front-end tools (e.g. Power BI, Tableau, KNIME, Python etc.) as well as for cross-platform data exchange (e.g. with Amazon AWS) for existing SAP solutions.

## Free text Extraction

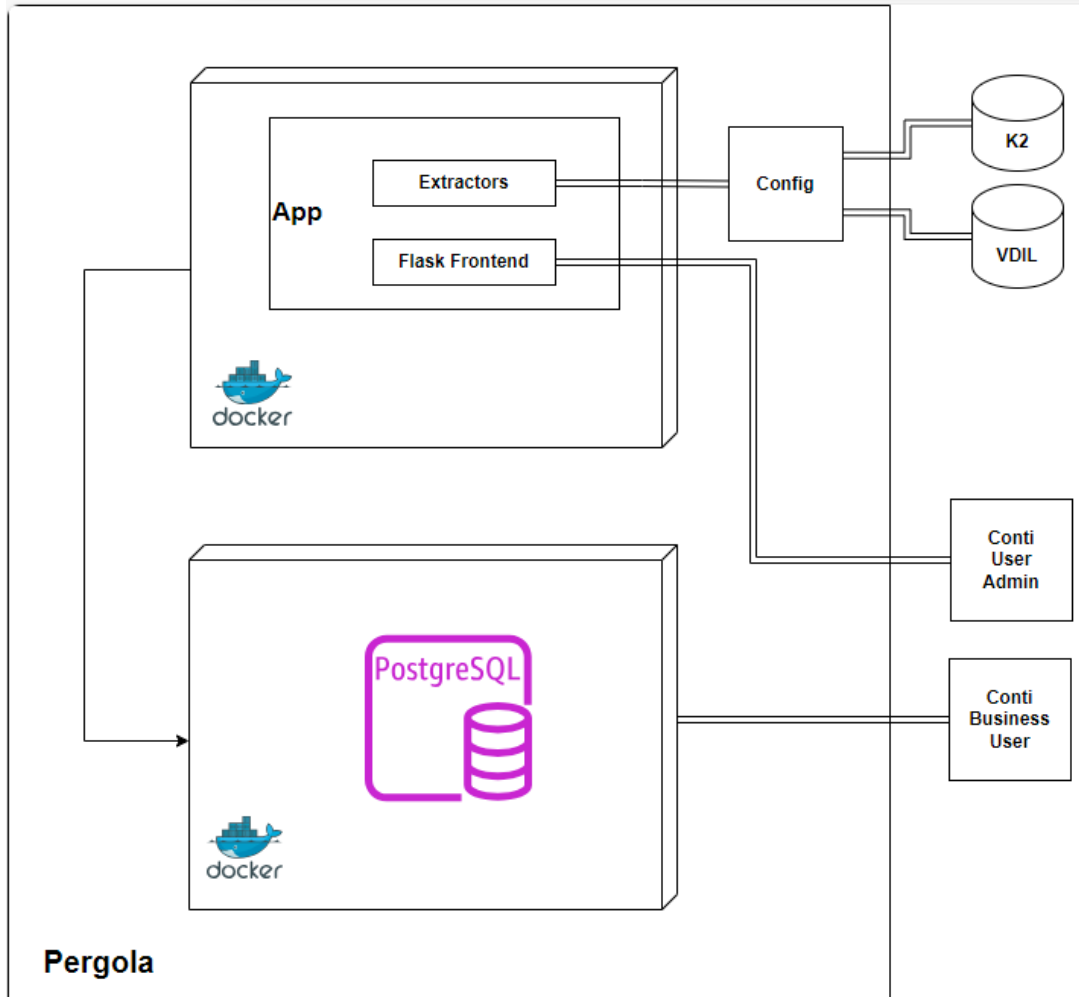
K2 database also includes Comments data for each request, which is introduced in a free text field. The goal is to extract information about the competitors, price, discount and marketing line from the free text.

Currently we tested an approach based on regular expressions to extract competitor data from free text, but we are still considering the next steps:

- Improve current approach by considering a complete list of competitors
- Improve regular expressions to detect price and discount correctly
- Use LLMs for context evaluation
- Marketing lines recognition

## Project Infrastructure

This project uses the [Pergola Platform](#) to manage stages, releases and configurations. Pergola is an application delivery platform and provides developers an easy and non-intrusive way of building, deploying and operating their applications. And it enables their users and customers instant and secure access to these applications. Pergola projects require a Manifest file (pergola.yaml) to define all project components.



## Project Repository

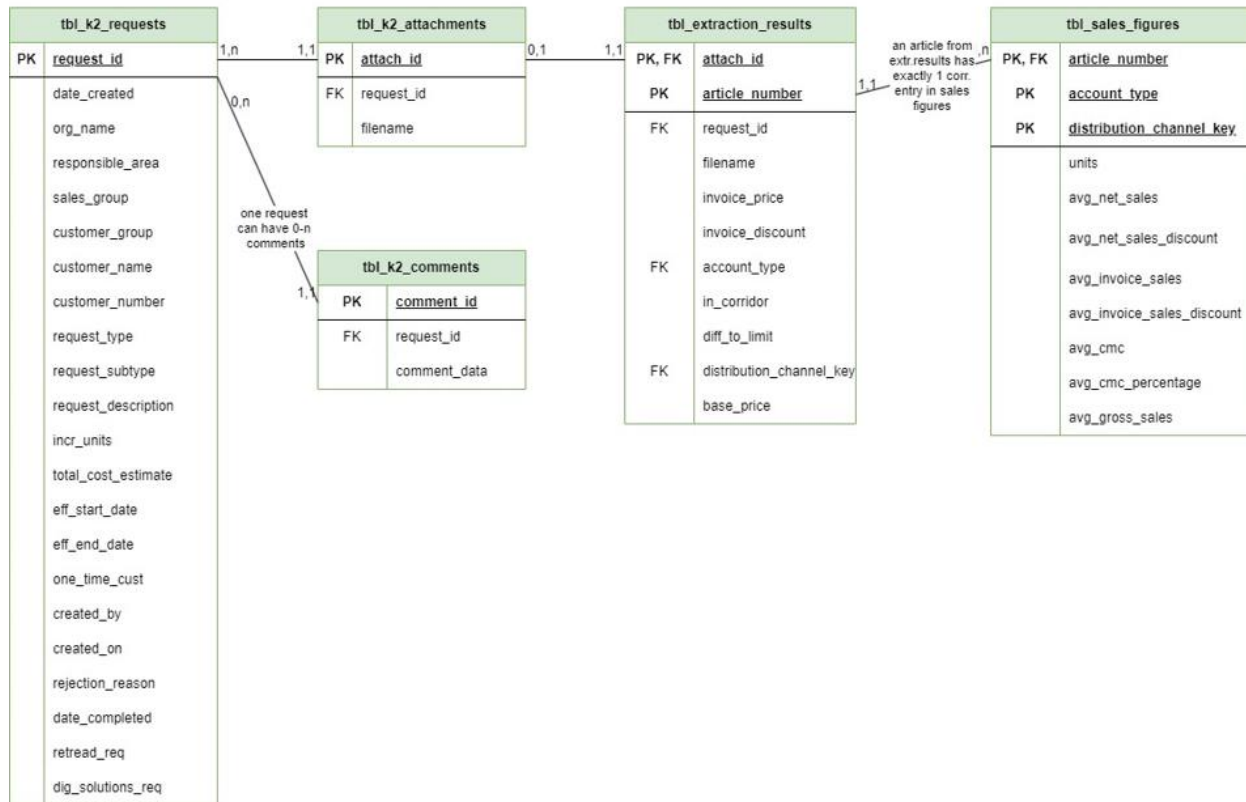
Version control is done in GitHub.

## Project Database

The project internal database is a PostgreSQL instance running in a container with data persisted to a volume in AWS.

The database includes tables to store data retrieved directly from the k2 system, and tables to store information extracted from other sources.

0,n because we do not extract from all attachment type (e.g. not from Word documents)





## Project Impact

A company's pricing strategy can help improve revenue by maximizing profits, responding to market conditions, and attracting customers

### **Dynamic pricing**

Adjust prices based on real-time market conditions to respond to demand changes and avoid lost sales or missed opportunities. For example, seasonal businesses or those selling fad products can increase prices during high demand periods to smooth out revenue.

### **Lower prices**

Attract budget-conscious customers and increase market share, but competitors may also lower their prices.

### **Premium pricing**

Create a perception of quality and brand name, and customers may be willing to pay more for it. For example, some customers pay more for brand name peanut butters or pain relievers, even though generic options are available.

Continental uses Premium Pricing for our top tier products, where we (generally) are willing to forego volume to gain from a better brand perception in the relevant tiers where we play, than our competitors (tiers 1 & 2).

Continental has as a goal to activate “dynamic pricing” but have obstacles to overcome to get there:

1. Receive a steady stream of competitor price points from the field
2. Receive ENOUGH price points so that we can make decisions from the data
3. Put a process in place where we are methodically giving this back to sales (iterative process).