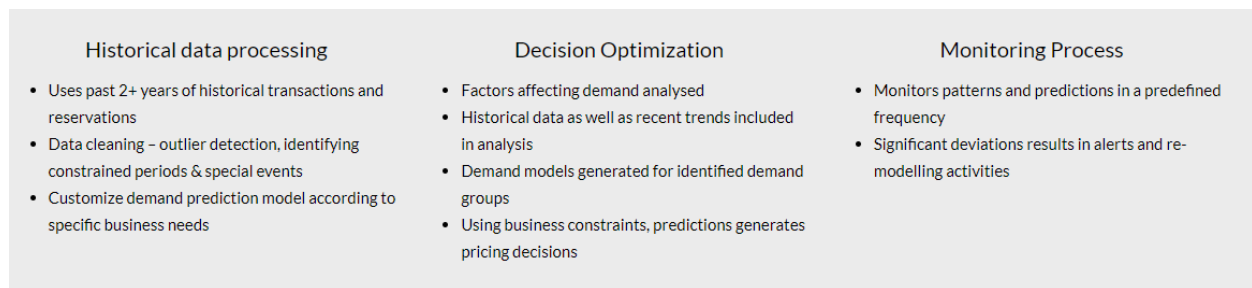GrayMatter's Car Park Revenue Management System (CPRM) is a demand driven dynamic pricing system for car parks in airports, malls and business centers. GrayMatter's Car Park Revenue Management System predicts and recommends future price every day for few days ahead based on historical data analytics, algorithms and business rules. It is built on advanced statistical models with several linear and non-linear variables for occupancy predictions.

Why CPRM?

- CPRM predicts pricing every day for the next few days factoring historical trends as well as recent data
- The solution operates within the definition of business rules
- The solution includes regular monitoring that alerts re-modelling activities in case pricing is off target
- CPRM allows end user to override the system recommended pricing
- The solution offers what-if-analysis capabilities to enable end users to do their own analyses and make informed decisions
- The solution offers customer segment specific pricing
- The solution factors seasonality, adjustments due to special events
- CPRM factors competitor pricing

CPRM Solution Approach

Historical data processing	Decision Optimization	Monitoring Process
• Uses past 2+ years of historical transactions and reservations • Data cleaning – outlier detection, identifying constrained periods & special events • Customize demand prediction model according to specific business needs	• Factors affecting demand analysed • Historical data as well as recent trends included in analysis • Demand models generated for identified demand groups • Using business constraints, predictions generates pricing decisions	• Monitors patterns and predictions in a predefined frequency • Significant deviations results in alerts and re-modelling activities

Solution Architecture