

# ADVANCED ANALYTICS USING OPEN SOURCE TOOLS

## Faster Data Blending And Data Analytics Using Open Source Tools (Knome)

### Overview

This is a case study of one of the clients of Pyramid Solutions who required a complete platform that coordinates with the heterogeneous activities in Analytics project like Data Integration, Data Cleaning, Data Manipulation, and machine learning. This case study describes the advanced analytics with Knime, how it meets the business needs, the benefits, Customer Segmentation Use Case, and Knime capabilities.

### Business Objective

- ▶ Suggest a data preparation & analytical tool that solves all the major problems encountered with the traditional analytics tool.
- ▶ A typical data preparation & analytical tool that allows business users to blend data from various sources.
- ▶ A single platform that has support for data integration, cleansing, exploration, manipulation and has a tremendous machine learning workbench.

### Business Problem

- ▶ Traditionally, preparing data for analytics involves a time-consuming and complex process, which requires specific tools and specialized skills.
- ▶ In the ETL process, the IT team extracts data from one or more sources, transforms it into a normalized format, and loads it into a centralized data warehouse.
- ▶ Data warehouses are inflexible.
- ▶ Only IT can prepare data and Data warehouses to emphasize reporting over ad-hoc exploration.

### Conclusion

- ▶ Seamless integration with various open source tools.
- ▶ Workflow control.
- ▶ Interactive data views and reporting.

## About Pyramid

Pyramid Consulting Inc. is a global technology and process driven software solutions company offering customer centric solutions. With knowledge and experience of the entire IT lifecycle, we help enterprises streamline core IT processes and augment their competitive advantage. Pyramid's global delivery model harnesses productive tools, agile methodologies, iterative processes and expert frameworks to provide innovative and cost-effective solutions.

Our domain and industry experts engineer robust technology solutions for clients in a wide range of industries including retail, logistics, healthcare, insurance, software development, financial services, media, publishing and telecommunications.

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### Business Solution

- ▶ Evaluate multiple data preparation & analytical tools along with Knime.
- ▶ Enable business users to blend data from various sources.
- ▶ Make it possible for analysts to connect to more data sources.
- ▶ Enable data preparation & analytics to analysts by themselves, sometimes just by a few clicks or drag-and-drop gestures in the user interface.

### Business Benefits

Self-service data preparation and analytics tools allow business users to blend data from various sources and doing data preparation & analytics themselves, sometimes just by a few clicks or drag-and-drop gestures in the user interface. The benefits of these tool are numerous and significant:

- ▶ Faster time to insight: Analysts can extract insights in minutes or hours rather than days.
- ▶ Drag-and-drop UI for business users: Data sources can be easily blended via drag & drop gestures.
- ▶ Expanding the range of data sources: Greater ease of use makes it possible for analysts to connect to more data sources.
- ▶ Eliminating the need for upfront data modelling: Data sources are prepared for analysis on the fly, eliminating the need for complex ETL processes.
- ▶ Node repository for Analytics: Gain insights from the data with help of node repository (which will do a specific action for an individual task) using Machine Learning.