



## CASE STUDY

# Advanced Analytics Integration to optimize installations for a Renewable Energy company

## Quick Summary

CRG Solutions' expertise and Alteryx implementation at the financial services company expedited data processing and provided meaningful insights, improving operational efficiency and decision-making. The comprehensive dashboards and reports ensured transparency and accountability, boosting corporate success. This successful integration marks a milestone in the company's journey towards data-driven decision-making and operational excellence.

## About the Customer

A leading renewable energy company in Asia, recognized the need to enhance its analytical capabilities to better manage its extensive portfolio of solar and wind energy assets. The company aimed to develop a series of advanced dashboards to monitor, analyze, and optimize the performance and financial returns of its renewable energy installations across various countries.

The implementation of solutions included following steps:

- **Enhance Energy Management:** Implement dashboards to monitor real-time performance of solar and wind assets.

- **Optimize Financial Performance:** Develop financial tracking and performance metrics to ensure optimal return on investment.
- **Improve Operational Efficiency:** Use geographic and performance data to

## Problem Statement:

The renewable energy company faced several challenges in managing its renewable energy assets:

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- **Complex Data Integration:** The diverse geographic spread and varied asset types required sophisticated data aggregation techniques.
- **Performance Variability:** Managing the intermittent nature of renewable energy sources and their impact on performance and financial returns.
- **Operational Oversight:** Need for real-time operational data to swiftly address maintenance and efficiency issues.

### Solution:

CRG Solutions developed a comprehensive analytical framework comprising multiple dashboards:

- **Energy Cockpit Dashboard:** Centralized monitoring of installed capacity, featuring breakdowns by energy type (solar and wind) and real-time performance metrics.
- **Geo Distribution Dashboard:** Visual representation of asset locations and performance across countries, providing insights into regional energy production statistics.
- **Plant Performance Dashboard:** Detailed analysis of individual plants, highlighting performance against targets and operational metrics.
- **Financial Performance Dashboard:** Tracking revenue generation, cost implications, and overall financial health of energy assets.

The implementation process involved:

- **Advanced Data Visualization Tools:** Utilized cutting-edge software to create intuitive and interactive dashboards.
- **Real-Time Data Processing:** Integrated IoT devices and sensors for up-to-the-minute data collection and dissemination.
- **Customizable Interface:** Allowed users to drill down from regional views to specific assets, facilitating detailed analysis and quick decision-making.

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The new analytics system provided significant improvements:

- **Enhanced Decision-Making:** Enabled more informed decisions through real-time data on asset performance and financial metrics.
- **Increased Efficiency:** Improved maintenance scheduling and operational adjustments reduced downtime and maximized output.
- **Financial Optimization:** Better financial tracking and analysis led to enhanced profitability and ROI for stakeholders.

### Business Benefits:



*A Trusted Solution Partner  
to achieve*

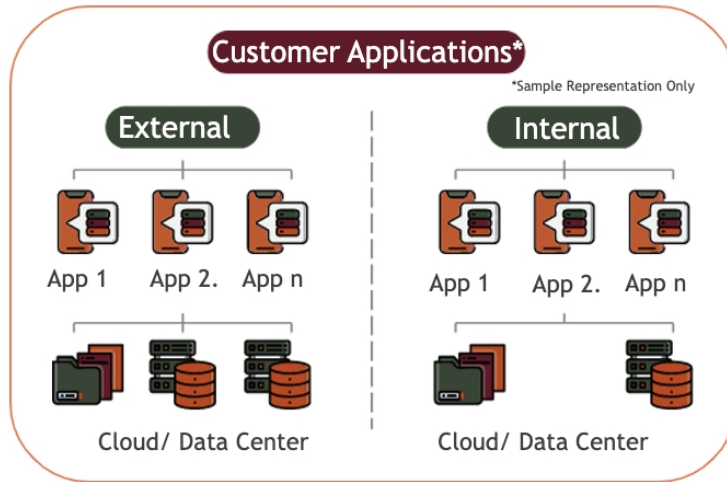
*Business Excellence*

# About CRG solutions

## We Cover

### Analytics

We setup practices, tools to derive insights (customers, products, apps, teams) to enhance or optimize business effectiveness with the help of products like Tableau, Alteryx, PowerBI, Cloud and MLOPs



### RPA

We automate all high volume and mundane tasks to reduce manual errors and to increase efficiency with the help of products like AA (Automation Anywhere), Yellow.ai

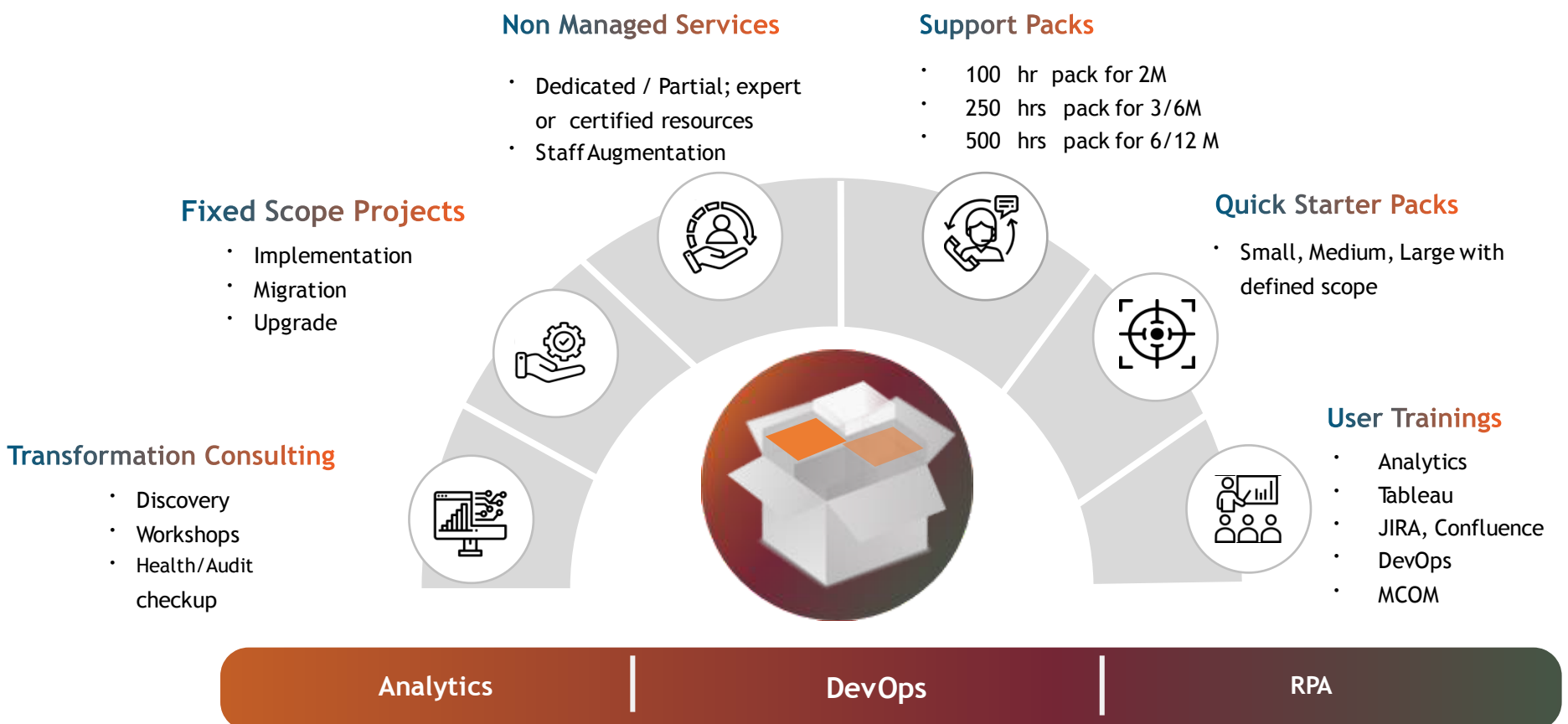


### DevOps

We help streamline the application development and maintenance processes with custom project management practices and implementation of world class software tools like JIRA, Azure DevOps, Azure Cloud to improve team productivity



## Services Portfolio



### Our Socials



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