GadgEon

Engineering
Smartness

BREAKING DOWN THE DATA SILOS FOR PRODUCTION MONITORING INSIGHTS

04 July 2020

Version 01

Problem Statement

A leading Print media publishing company with multiple plants across the country, has high level of automation at various stages of its workflow. This has created silos of data systems and lack of an aggregated and correlated source for applying data analytics that drive business value enhancement at factory level and at organizational level.

- Data needs to be aggregated from over 15 disjoint systems and sensors to create an aggregated and correlated database system.
- The aggregated and correlated data to facilitate the development of deep insights at a plant level as well as at the organization level to drive business benefits such as:
  - Operational excellence
    - OEE improvement
  - Cost optimization
    - Cost of downtime
    - Budget monitoring
  - Waste Identification and elimination
  - Real time status monitoring of ongoing operations
  - Automatic Analytical Dashboards with decision-making insights.
  - Predictive and Prescriptive Maintenance of equipments
    - Predictive insights for unplanned downtime
  - Resource utilization
    - Utility Performance trending
    - Consumables insights

Data Description

- Data Sources
  - Data to be obtained from multiple sources such as ODBC databases (about 10), EMS server, Newsprint loading system server, CTP Servers, Mail Room Data, and Line monitors.
  - Drive Systems, Security Systems like – CCTV, Attendance System, SAP, Standalone sensors, PLCs so on
- Data Capture Method
  - Using ODBC connections
  - Through network access
  - Direct data collection from sensors through edge gateway
  - Manual data entry

Our Approach

Break this data project down into phases

- Initial Phase
  - Aggregation of data from existing sources
  - Using simple analytical algorithms
  - Computation of KPIs and Dashboards
  - Manual entry for certain segments of data
  - Building of quality aggregated historical data
- Next Phase (s)
  - Integration of additional data sources
  - Incrementally replace manual data entry with automated interfaces and data collection
  - Implementation of sophisticated analytical methods for predictive insights
  - Continue building quality historical data
  - Incrementally automating the production monitoring and management.
- Subsequent Phases
  - Building of ML/DL models for analyzing data
  - Prescriptive models for optimized outcomes like:
    - Action recommendations
    - Resource optimization so on

THANK YOU

For More Details, Let's Connect

Gadgeon Systems Inc.

881 Yosemite Way, Milpitas, CA 95035, USA

CONTACT - USA

Mani Ram - Vice President - Solutions and Technology

+1-678-900-0874 | mani.ram@gadgeon.com

Gadgeon Smart Systems Pvt Ltd.

Vl 405/E1, Fathima Tower, Maleppally Road, Thrikkakara PO,
Kochi, Kerala, PIN: 682021, India

CONTACT - INDIA

Hari Nair - CEO & Co-Founder

+91 989-501-5880 | hari.nair@gadgeon.com

Gadgeon Europe

Antwerpsesteenweg 124/54, 2630
Aartselaar, Belgium

+32 475 23 39 46 | europe@gadgeon.com

sales@gadgeon.com