



## Business Cases for Implementing **Big Data** for Manufacturing Environments

### MARGIN RECOVERY

- Reduced material cost and recover system capacity

### PRODUCT QUALITY AND SAFETY

- Address and fix short comings that generate defects and discarded items
- Product quarantine based on specific objective data not just approximations

### ELIMINATE OVERLAPPING INVESTMENT AND SUPPORT

- Optimize resource allocation

### MEASUREABLE ROI

- Shift from an unstructured process to an analytics/data based approach with measurable results

### COLLABORATION

- Synergy of BI and Big Data
- Macro and granular views
- Allow operators, engineers and management to work together based on data
- Break away from a siloed data marts and allow access to all information across the enterprise

## Example Data to Capture

- ⇒ Integrate PLC's, SCADA and DCS Equipment to capture real-time floor data
- ⇒ Integrate with meters, sensors and environmental management systems
- ⇒ Supply Chain tracking, automated raw material cost / quality tracking
- ⇒ Customer data / satisfaction integration
- ⇒ Capture customer usage data – requires ability for device or item to send user info back

### BIAS CORPORATION

BIAS Corporation is a recognized leader in architecture design, tuning, implementation, and management. As an Oracle Platinum Partner, BIAS provides experienced Architects to assist with everything from identifying performance bottlenecks, to defining a long range system architecture plan to managing the purchase and implementation of the Oracle Engineered Systems.

To learn more about how Big Data can benefit you, please contact us at (888) 907-0352 or [info@biascorp.com](mailto:info@biascorp.com).



## Potential Visualizations



- Allocate and estimate energy consumption and emissions for all entities and the entire value chain.



- Visualize shop floors with real-time or actual historic throughput information to identify bottlenecks and reduce time and cut costs to redesign manufacturing processes.



- Reduce R&D cost and time by enabling virtual collaboration along the entire supply chain and concurrent engineering, rapid experimentation and simulation and co-creation.



- Aggregate customer data to improve service, capture cross and up-selling opportunities and accelerate design enhancements.



- After-sales data and usage information from sensors and customer feedback in real-time to trigger service events and detect manufacturing or design flaws.



- Implement advanced demand forecasting and supply chain planning across suppliers.