Atos Codex for Manufacturing

Prescriptive Manufacturing Business Planning

Digital transformation is creating new challenges and opportunities for manufacturers. These are making ever greater use of new digital capabilities to improve business outcomes. Prescriptive Manufacturing Business Planning (PMBP) is part of Atos Codex, our complete set of analytics solutions and capabilities for data-driven business transformation.

Challenges

Today’s manufacturers are facing a complex environment with heterogeneous products, demanding customers, globally disparate production sites, and a variety of sales channels. This complex environment reduces transparency across the supply chain and brings several challenges:

- Limited market-based and very complex pricing as well as restricted market transparency
- High fluctuation of capacity utilization and limited cross-factory collaboration
- High stock levels and stock bought as a precaution
- Long delivery times and low delivery reliability of supplier
- Customer expectations for high reliability
- Long planning cycles combined with a large number of iterations
- Planning outcomes not reliable or trusted.

Business potential

New platform technologies and advanced data science methodologies offer great opportunity to leverage available data and disruptive technologies (e.g. cloud computing).

Atos significantly improves internal planning process outcome to achieve optimized revenues, margin and production. As a leader in digital transformation we combine advanced analytics components with data from all along the value chain to increase transparency and create new insights.

Atos has the skills and capabilities to boost your business performance. Significant EBIT improvement and asset reduction can be achieved by:

- Additional revenues and margin increase through optimized sales prices
- Higher productivity enabled by improved and smoothed capacity utilization over time
- Reduced working capital and assets generated by optimized demand and supply forecast
- Improved purchasing conditions through long-term planning and guaranteed purchase quantity.

62% of manufacturers see analytics as one of the major topics on their IT agenda (PAC)

84% are using or planning to use advanced and predictive analytics in the next few years (BARC)

81% of manufacturers believe that big data has the potential to enhance production and efficiency (Gartner)

Factsheet
**The solution**

Atos and a leading global industrial manufacturer have jointly developed an optimized end-to-end prescriptive analytics planning solution.

The Prescriptive Manufacturing Business Planning (PMBP) solution aims to overcome silo thinking and increase transparency, thereby closing the traditional gap in information flow between sales and production. Company internal sales, production, purchasing, and asset data is integrated within the decision platform, and then enriched with external data to inform and enable end-to-end transparency and provide decision support across the whole value chain.

This platform-based IT solution provides a range of functionalities, including:

- **Optimized forecast**: Advanced forecast for consumable materials/supplies in production and purchasing. Prognosis of capacity demand per production line, segment, or site.
- **Capacity utilization**: Optimization of capacity utilization over time per production line/factory based on capacity optimum.
- **Pricing and offer support**: Optimal price corridor, discount, and delivery time for each offer.
- **Advanced analytics**: An advanced analytics engine enhances decision platform with data science methodologies (e.g., offer winning probability, multivariate optimization, demand forecast).
- **Integration**: Functionalities are interconnected (e.g., the offered discount corridor considers the actual production capacity).

Prescriptive Manufacturing Business Planning (PMBP) provides a data integration interface as well as a state of the art graphical user interface (GUI) to enable better management decisions.

**The implementation**

Atos provides ready-to-use basic functionalities and modules producing cost-effective results quickly. This accessible, affordable, and practical approach enables a flexible integration into existing IT and BI landscapes.

We deliver a highly standardized, modular, industrial analytics solution, from concept to implementation and operation. An interdisciplinary customer team supported by industry and digitization experts from Atos, will build your solution – based on best practices and proven PMBP functionalities.

The solution is implemented in an agile six-step approach:

- **Target definition**: Derive action fields, identify business areas for improvement, and define levers.
- **Analysis**: Gain as-is transparency via structured interviews/workshops and develop target situation.
- **Concept**: Define business rules, data requirements, and data model tailored to your specific needs. Furthermore, we will design the target end-to-end processes.
- **Development**: Agile development of data management functionalities. Derive and implement analytics engine and design reports and dashboards.
- **Integration**: Integrate solution functionalities and data management into existing IT environment.
- **Roll-out**: Implement roll-out strategy accompanied by change management.

Based on our comprehensive manufacturing and IT expertise we provide our clients with an innovative and convincing solution for optimized business planning.