

Sonata helps a Precision Component Delivery System leader improve Inventory Management Efficiency using AI/ML based Demand Forecasting Model and Intelligent Data Insights

When a US based Precision Component Delivery Systems Leader embarked on a digital transformation journey, they turned to Sonata to help build the overall digital framework planning and accelerate the modernization programs with primary focus on Data Modernization. With Sonata's Platformation™ Methodology, they were able to trigger data driven transformation through data platform, in operations, starting with Inventory Management and Supply Chain using advanced analytics and forecasting models, improving the efficiency by nearly 30%.



About the Company

The company, with facilities spread across North America, Asia, and Europe, supports the global production of the world's electronics manufacturers and offers products used in the assembly process of devices including computers, mobile phones, medical components, smart appliances, and automobiles.

Customer Context

The organization's digital transformation initiatives were aimed at scaling the operational model to match the business expansion plans. With the scale of operations spread across the globe, the organization dealt with huge volumes of data that needed to be managed and processed continuously for both reporting and forecasting purposes to ensure operational transparency and efficiency.

- One of the imminent challenges the company was dealing with was the lack of a unified data management model, to handle the volume and variety of data churned out by various systems within the ecosystem. This impacted the reporting and forecasting efficiencies.
- Sonata with its Platformation™ led approach helped build a data management platform with AI based forecasting algorithms and data insights that helped improved the data trust ratio amongst the business operations, resulting in high forecasting accuracy and business responsiveness.

- The data modernization engagement also helped accelerate the digital transformation through a three stage data transformation engagement that laid the foundation for accelerated digitization. This led to upgrade of the current dynamics platform, modernization of the transactional ERP database, building a data platform for analytical insights and predictive analytics.
- The platform leveraged Dynamics and Microsoft Azure Stack capabilities including AX 2009, Data Gateway, Data Warehouse, Azure Data Factory, Dynamics 365, Azure SQL, Azure Data Lake Storage, Power BI, Azure Machine Learning Studio and Azure Monitoring Services.

Partnership Highlights

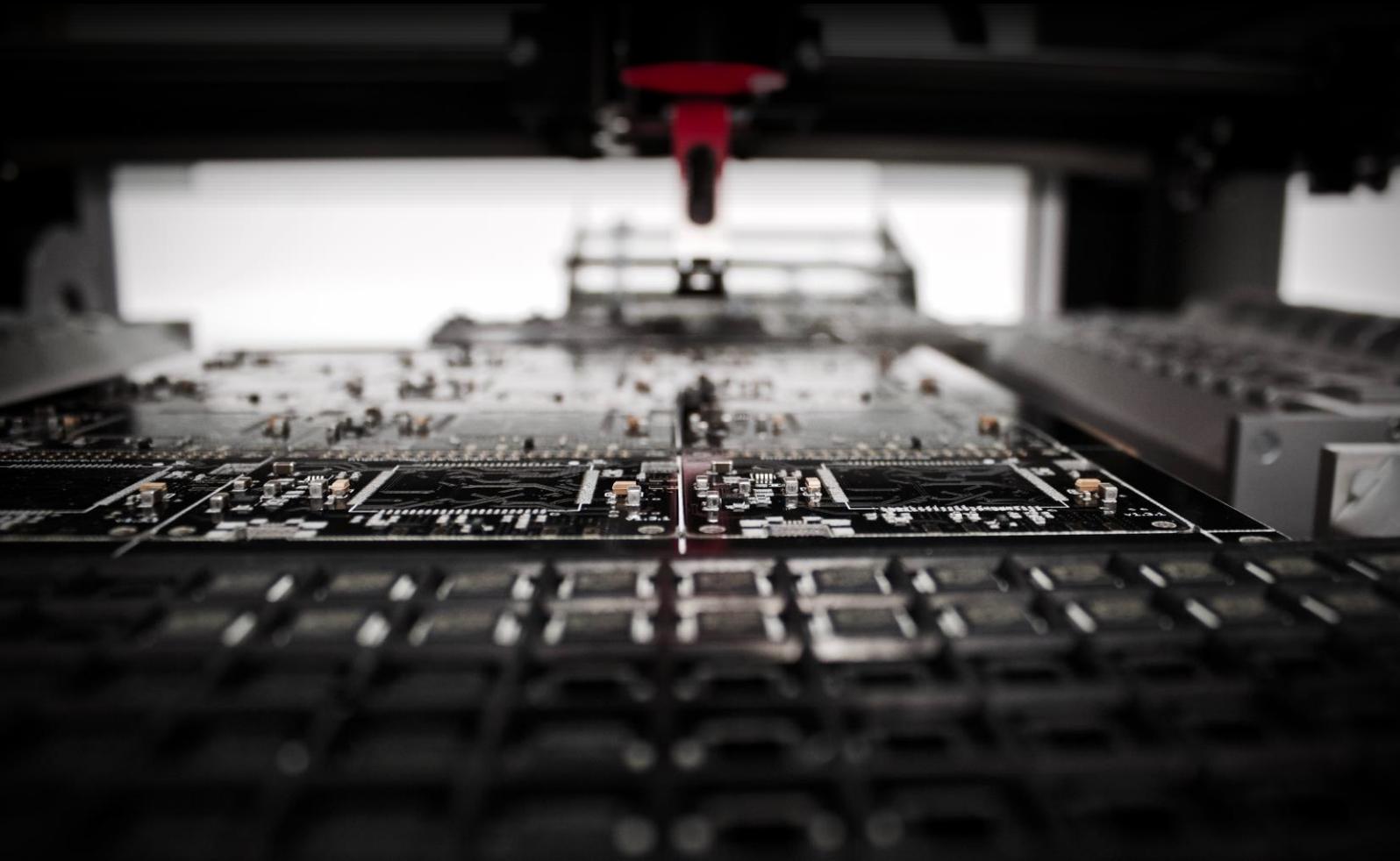
Sonata was chosen as the strategic partner due to our Microsoft Full Stack Capabilities and unique Platformation™ approach to help realize Digital Transformation agenda. Sonata helped engineer the platform with a combination services that include Azure Digital Services to build data storage components, custom data platform and modernizing digital processes with Dynamics 365.

Solution Facts

The solution involved the upgrade of the dynamics implementation onto D365, modernization of transactional ERP and building a data platform to support consolidated reporting, predictive analytics, data insights and forecasting algorithms.

Key Highlights of the solution include -

- Upgrade their existing Microsoft Dynamics AX 2009 instance for all their 10 Entities / Division onto Microsoft Dynamics 365 finance and operations on Cloud and consolidating data from AX2009 and D365 data systems for reporting uniformity
- Building Predictive Analytics on the consolidated data layer
- Leveraging D365 integration with Azure Machine Learning Studio and build multiple forecasting models that included ML based model for items with limited variations and Moving Average Model for items with significant amount of variations
- Building Enterprise Asset Management Model
- Anytime access to consolidated historical and real time data for the Business teams to run forecast reports



Business Benefits

The engagement with Sonata resulted in benefits like:



Enhanced sales with automated accurate demand forecast updates based on the historical data



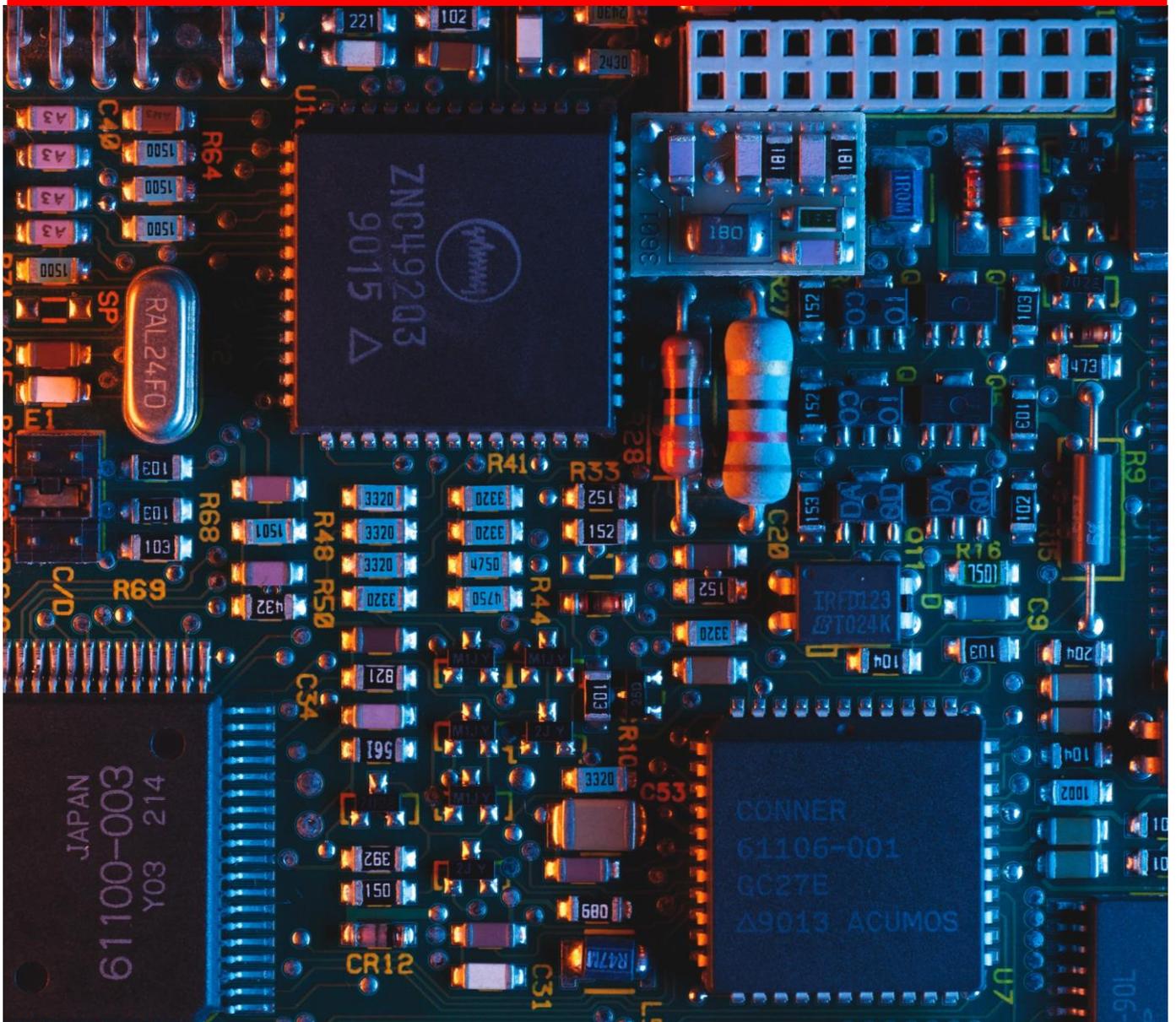
Improved reporting accuracy and access to all stakeholders, enabling transparent, faster and smarter decision making



Improved order processing efficiencies due to higher forecasting accuracy and data trust



Pre-defined reports and analytics and real time insights into operations provided a comprehensive view of operation status and transparency to all stakeholders





WHY SONATA?

Sonata helps clients unlock value and growth through Platforms with Sonata's proven Platformation services. We also help enterprises in shaping their Digital Agenda, Platform thinking and in reimagining Platform business models and ecosystem.

Sonata's platformation approach helps clients to choose a solution that best fits their needs; balancing readily available platforms and solution customization

1. **Sonata READY:** End-to-end, industry-specific digital business platforms
2. **Sonata ACCELERATE:** Deploy popular horizontal platforms adding required functionality
3. **Sonata CUSTOM:** Engineer custom platforms that deliver unique digital capability and scalability

Sonata is a global technology company, that enables successful platform based digital transformation initiatives for enterprises, to create businesses that are connected, open, intelligent and scalable. Sonata's Platformation™ methodology brings together industry expertise, platform technology excellence, design thinking-led innovation and strategic engagement models to deliver sustained long term value to customers. A trusted partner of world leaders in the Retail, Manufacturing, Distribution, Travel, services and Software industries, Sonata's solution portfolio includes its own digital platforms such as Brick & Click Retail Platform®, Modern Distribution Platform®, Rezopia Digital Travel Platform®, Kartopia E-commerce Platform®, Halosys enterprise development automation Platform®, and CTRM Commodity trading and risk management Platform®, KODO - AI powered customer experience (CX) Platform, Sonata's Platformation realization services have been specifically designed so that implementation of services on Microsoft Dynamics 365, Microsoft Azure, AWS, Cloud Engineering, Managed Services as well as on new digital technologies like IoT, Artificial Intelligence, Machine Learning, Robotic Process Automation, Chatbots, Block Chain and Cyber Security, deliver to the Platformation promise. Sonata's people and systems are nurtured to bring together the depth of thought leadership, customer commitment and execution excellence to make a difference to business with technology.



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