

Improving flexibility and raising productivity with SIRI

SEW-EURODRIVE leveraged the Official SIRI Assessment to catalyse their Industry 4.0 and digital transformation journey.

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Challenge

Adapting to Dynamic Market Demands: SEW-EURODRIVE Pte Ltd's Commitment to Local Assembly and Industry 4.0

In alignment with the SEW-EURODRIVE Group's global philosophy of “think global, act local,” SEW-EURODRIVE Pte Ltd has been dedicated to assembling products locally in Singapore since 2018.

This local production strategy ensures that they can promptly meet the unique and specific requirements of their customers in the region, delivering tailored solutions with increased efficiency.

The diverse nature of their customers' demands — characterised by high-mix, low-volume product requirements and stringent short delivery timelines — has presented significant challenges.

These challenges include managing a wide variety of product specifications, maintaining rapid turnaround times, and ensuring high-quality standards amidst fluctuating market conditions. To navigate these complexities, SEW-EURODRIVE Pte Ltd recognises the imperative need for transformation.



To address these challenges and continue to deliver superior service, SEW-EURODRIVE Pte Ltd is urgently advancing the implementation of Industry 4.0 concepts within their manufacturing processes.

Embracing Industry 4.0 technologies, such as automation, data analytics, and interconnected systems, will modernise our factory operations, significantly enhancing their flexibility, productivity, and overall competitiveness.

This transformation will enable them to better respond to the dynamic demands of the market, ensuring that they remain a reliable partner for their customers while setting new standards in operational excellence.

Solution

Crafting a sustainable Industry 4.0 transformation roadmap with SIRI

To develop a sustainable Industry 4.0 transformation roadmap, SEW-EURODRIVE Pte Ltd recognised the need to identify specific focus areas. By pinpointing these areas, the company could strategically allocate resources to drive progress and achieve enduring results that would sustain the transformation journey. This strategic approach necessitated a comprehensive assessment, which is where the Official SIRI Assessment (OSA) plays a critical role.

In May 2021, SEW-EURODRIVE Pte Ltd engaged a Certified SIRI Assessor (CSA) to conduct an OSA, despite the internal challenges posed by COVID-19. Adapting to the pandemic's constraints, the assessment was executed through a two-day virtual workshop with the CSA, supplemented by a separate physical inspection of the factory conducted prior to the workshop. This hybrid approach ensured a thorough and detailed evaluation while adhering to health and safety protocols.

The OSA meticulously examined the three core areas of Industry 4.0 — Process, Technology, and Organisation — providing SEW-EURODRIVE with a clear understanding of its current standing in terms of Industry 4.0 maturity across 16 distinct dimensions. The assessment revealed insights into strengths and areas for improvement, guiding the company on how to enhance its capabilities in a targeted and incremental manner.

Leveraging the insights gained from the OSA, SEW-EURODRIVE utilised the SIRI frameworks and tools to ensure that the identified focus areas would yield the most significant impact. This involved aligning the improvement roadmap with key financial metrics such as costs and revenues, as well as critical performance indicators (KPIs). By doing so, SEW-EURODRIVE ensured that their transformation initiatives were not only strategically sound but also economically viable, driving maximum impact.

This structured approach enabled SEW-EURODRIVE to embark on its Industry 4.0 transformation journey with confidence, equipped with a clear roadmap that balanced ambitious goals with practical, measurable steps. The ongoing application of the SIRI frameworks ensures that SEW-EURODRIVE continues to refine and advance its transformation efforts, maintaining its competitive edge and positioning itself as a leader in the industry.

Results

Key focus areas and strategic enhancements from the OSA Report

Based on the OSA report, the company identified four highest-impact value dimensions to focus on for their Industry 4.0 transformation roadmap planning. This strategic focus enabled the company to channel its resources effectively and address the most critical areas for improvement. It also allowed the company to develop a comprehensive improvement roadmap and adopt various technologies to implement the following required improvements:



Performance Dashboard on Inventory System



HRM System to Develop Staff Competency



Upgrading Equipment with Digital Functionality



Evaluate CRM-PLM-MES Integration Solution

With the insights from the OSA report, the company re-evaluated its existing Key Performance Indicators (KPIs) to ensure they align with the newly developed roadmap. This re-evaluation ensures that the KPIs are relevant and supportive of the company's transformation goals, providing clear metrics to track progress and measure the success of the implemented improvements.

Conclusion

Sustaining competitive edge through strategic Industry 4.0 transformation

By leveraging the insights gained from the OSA, SEW-EURODRIVE Pte Ltd has laid a solid foundation for its Industry 4.0 transformation. The strategic focus on high-impact value dimensions and the adoption of advanced technologies have empowered the company to streamline operations, enhance workforce capabilities, and improve overall efficiency.

Through continuous evaluation and alignment of KPIs with the transformation roadmap, SEW-EURODRIVE is well-positioned to sustain its competitive edge and drive long-term growth. This comprehensive approach ensures that SEW-EURODRIVE remains at the forefront of innovation, ready to meet the evolving demands of the market with agility and resilience.

“The Official SIRI Assessment confirmed that previous upgrading efforts greatly contributed to our company’s transformation goal but it also revealed areas that we had neglected and that need more attention in the future. Ultimately the SIRI analysis showed us how well our company is prepared to transform into a future-ready organisation.”

Thilo Grimm, SEW-EURODRIVE PTE LTD Managing Director

About SEW-EURODRIVE

Established in 1981 in Singapore, SEW-EURODRIVE Pte Ltd is a local subsidiary of SEW-EURODRIVE Group. Our product portfolio combines high-quality mechanics, sophisticated electronics and application-specific components to give our customers around the globe real competitive advantages.

Always true to our motto “Driving the world”, SEW-EURODRIVE Pte Ltd’s vision is to be the preferred partner of every company that develops, builds or operates Industrial Automation Equipment and aim to achieve this by providing solutions which exceed the expectation of our customers.

SEW-EURODRIVE PTE LTD

Industry: Machinery & Equipment

Company size: 90–100 employees

Company revenue: –

Website: www.sew-eurodrive.com.sg

About INCIT

The International Centre for Industrial Transformation (INCIT) is an Environmental, Social, and Governance (ESG) institution which champions manufacturing transformation. As an independent non-profit entity, INCIT (pronounced as “insight”) collaborates with both public and private sector manufacturing-related organisations to support industrial transformation, to enable global manufacturing to become more resilient and productive, and better positioned for future success.