Wiwynn ramps up production for global growth

Laying foundations for the factory of the future with IBM, SAP and Microsoft

IBM Global Business Services

8-minute read

In partnership with

SAP

Microsoft

Each year, digital services become more deeply embedded in our personal and professional lives. Wiwynn Corporation creates the essential server, storage and networking solutions that cloud service providers (CSPs) such as Microsoft® Corporation and social media giants such as Facebook rely on to enable round-the-clock operations for millions of businesses and consumers around the world.

As a cloud IT infrastructure provider, Wiwynn works closely with its CSP clients to provide optimized solutions and enable the best total cost of ownership (TCO). Through the ODM-

direct business model, Wiwynn designs, builds, configures and ships server racks directly to its CSP clients, accelerating innovation and deployment. The company's operations span multiple global facilities, including its headquarters in Taiwan, surface-mount technology factories in Taiwan and China, and rack integration plants in North America and Europe.

James Wen, Chief Information Officer (CIO) at Wiwynn, explains: "In recent

years, Wiwynn has driven fast-paced growth. In 2020, we served around 10% of the global server market and delivered solutions to more than 300 data centers. Looking ahead, we aim to build on this success by growing our footprint in the fields of 5G and edge computing, and expand into data center solutions such as cooling and energy-saving technologies."

At the same time as it moves into new business segments, Wiwynn's existing

CSP clients are themselves growing rapidly—raising global demand for server solutions. To capture the new opportunities, the company aims to increase its manufacturing capacity significantly in the coming years.

"Our end-to-end business processes depend on multiple sites located thousands of miles apart," explains Wen. "To help ensure we can deliver orders on time, we've relied for many years on integrated SAP ERP solutions to orchestrate our complex supply chains efficiently."

In the past, Wiwynn's core business applications—including SAP® ERP— were hosted by its parent company. As Wiwynn prepared to become an independent, publicly listed enterprise, it needed to take on management of its own data and systems to comply with regulatory requirements.

"We saw the need to re-platform as a valuable opportunity to prepare our business for the next phase of its transformation journey," Wen recalls. "By moving to the next-generation ERP SAP S/4HANA®, we were confident we could create tighter integration between our business units, while at the same time making it easier to exchange information with other participants in our supply chain."

He continues: "Even more importantly, SAP S/4HANA will lay the foundation for digital transformation technologies, including Industry 4.0, allowing us to increase the level of automation on the factory floor. Innovations like industrial Internet of Things [IoT] sensors could help us ramp up manufacturing throughput while keeping costs lean—a key objective as we strive to grow our business."

"Future-ready business systems will be essential to our digital transformation journey, and that is exactly what SAP S/4HANA on Microsoft Azure—delivered by consultants from IBM—offers us."

James Wen, CIO, Wiwynn Corporation

Reduces infrastructure TCO by

40%

over 4 years

Accelerates provisioning of SAP environments by

99%

thanks to cloud agility

Launching into cloud with expert partners

To allow it to focus on its core competencies and reduce the capital investment for the planned SAP S/4HANA environment, Wiwynn targeted a cloud platform. After reviewing top cloud vendors, the company selected Microsoft Azure as the destination for its mission-critical SAP business systems.

"From early on in the decision-making process, we decided that the maturity and economies of scale of the cloud made it the optimal choice for our growing business," says Wen. "Of all the options we considered, we felt that Microsoft Azure was the best fit for SAP

S/4HANA. As well as being fully certified for SAP solutions, Microsoft Azure offers us robust service-level agreements that ensure our business systems are available 24x7. A deep-dive assessment

workshop with the Microsoft Azure team convinced us that the platform offered the flexibility, performance, scalability and availability to help us meet our long-term objectives."

Wiwynn was confident that SAP S/4HANA on Microsoft Azure would be the keystone for its digital transformation capabilities. To reach the cloud destination without disruption, completing the migration in a timely manner was crucial. The company had just 12 months to move away from its parent company's platform, and a tight window of only 48 hours to complete the switchover to the new systems.

Recognizing that there was almost no room for error, Wiwynn looked for the support of an expert partner, and engaged consultants from IBM to help drive the project.

"Because the project involved our entire international business, finding a partner with global reach was crucial—and IBM delivered," says Wen. "The IBM team understood our high-level goals for the project and developed an approach that allowed us to minimize

risk, control costs and accelerate progress throughout the journey to SAP S/4HANA on Microsoft Azure. IBM even identified a major technical bottleneck in our proposed approach early on, and proactively helped us find a solution to avoid the issue."

Working with teams from Microsoft and IBM, Wiwynn first isolated its SAP ERP systems from the parent company's environment and moved the resulting SAP ERP instance to a sandbox environment in the Azure Cloud. After performing the necessary upgrades to SAP ERP, IBM performed a selective conversion to SAP S/4HANA. By only converting a subset of its applications, Wiwynn could leave its most customized systems—including SAP ERP applications to support the manufacturing process—untouched, minimizing the risk of downtime and business disruption.

After testing the new SAP S/4HANA environment in the sandbox environment, Microsoft moved the SAP platform to the target data center in the US and configured the platform for high availability. In parallel, consultants from IBM worked with Microsoft to help build, configure and secure the new SAP environment.

"We greatly valued the IBM approach, as it allowed us to keep our project moving forward quickly while minimizing our exposure to the risk of business disruption during the go-live," adds Wen. "The project demanded close collaboration between all stakeholders, and the IBM, Microsoft and Wiwynn teams truly worked together as one throughout. The close strategic alliance between IBM and Microsoft was evident from the very beginning, and the two companies provided us with all the technical resources we

needed to ensure the success of the move to cloud."

Midway through the project, the COVID-19 pandemic struck. Despite the significant disruption to global business, IBM and Microsoft worked together to help keep the project on track—allowing Wiwynn to go live on time.

"In a normal project of this sort, our IT personnel would be on site in locations such as our assembly facility in Mexico to oversee the go-live—but the pandemic made that impossible," comments Wen. "The carefully planned, step-by-step approach to the project designed by constants from IBM helped us to quickly transition to remote working and go live with SAP S/4HANA without any impact on our global business users."

"Thanks to IBM, we've moved to a next-generation ERP that will help us to optimize our processes, capitalize on the new opportunities, and grow our business."

James Wen, CIO, Wiwynn Corporation

Breaking ground for Industry 4.0

By partnering with IBM, Wiwynn successfully moved to SAP S/4HANA on Microsoft Azure without any disruption to its mission-critical manufacturing operations. As well as helping the newly independent company to meet its regulatory obligations, the new solution is laying the foundation for the company's ongoing digital transformation, including its move toward Industry 4.0 technologies.

"We have already targeted our factory in Tainan City, Taiwan, as a possible incubator for future automation initiatives," explains Wen. "By instrumenting our manufacturing

equipment with industrial IoT sensors, we predict that we will be able to gather valuable data such as asset condition, manufacturing throughput and production quality—and even support advanced capabilities such as automated guided vehicles on the factory floor."

He continues: "Ultimately, Industry 4.0 technologies will allow us to manufacture higher volumes of products at competitive cost and high quality, empowering us to capture incremental opportunities in the global CSP and enterprise data center market.

Future-ready business systems will be essential to our digital transformation journey, and that is exactly what SAP S/4HANA on Microsoft Azure—delivered by consultants from IBM—offers us."

The new SAP solution is already delivering powerful benefits for Wiwynn. With SAP S/4HANA, the company can more easily share real-time data on orders, production and logistics with its global network of customers and supply chain partners, contributing to more efficient, data-driven operations. And thanks to Microsoft Azure, the company is delivering these enterprise-class capabilities with a lean IT team of just three full-time equivalents.

"By choosing the cloud rather than building our own on-premises data center, we've achieved substantial capital and operational cost avoidance,"

confirms Wen. "We estimate that SAP S/4HANA on Microsoft Azure will reduce our total cost of ownership by 40% over four years compared to an equivalent on-premises solution. And because we are in the cloud, scaling out to support new business services is significantly faster and simpler than before. In the past, standing up the infrastructure to create a test environment for a new SAP solution could take up to a month of work. With Microsoft Azure, everything its ready and waiting for us in as little as two hours—over 99% faster."

Looking ahead, Wiwynn is planning to build on its work with IBM and Microsoft to deliver valuable new capabilities to the business. For example, the company aims to harness the SAP Fiori user experience to offer its decision-makers mobile access to key data, and to incorporate solutions from SAP

Business Technology Platform to further streamline core business processes.

"With SAP S/4HANA supporting us, we've opened up a world of new possibilities for business innovation," Wen says. "We already have a number of exciting initiatives in the pipeline, including combining blockchain technology with our SAP data to deliver deeper insight into the manufacturing histories of our components, and real-time integration with our customers and supply chain vendors to streamline deliveries to our clients."

He concludes: "The cloud marketplace is set for decades of continued growth. Thanks to IBM, we've moved to a next-generation ERP that will help us to optimize our processes, capitalize on the new opportunities and grow our business."

About FNZ (UK) Ltd.

Founded in 2012 in New Taipei City, Taiwan, Wiwynn Corporation (external link) is an innovative cloud IT infrastructure provider of high-quality computing and storage solutions for the world's leading cloud service providers, as well as rack solutions for enterprise data centers.

Solution components

- IBM® Global Business Services®
- Microsoft Azure
- SAP® S/4HANA®