Business Challenge

To establish itself in Pakistan, Hyundai Nishat Motor (Private) Limited aims to win market share with fast deliveries and highly competitive pricing. How could it create a nationwide automotive business from scratch?

Transformation

Hyundai Nishat Motor (Private) Limited is using best-practice workflows in SAP S/4HANA® on IBM® Power® Systems and IBM Storage to accelerate its rollout across Pakistan, at low cost and high efficiency.

Shuja ur Rahman
Head of IT
Hyundai Nishat Motor
(Private) Limited

Business benefits:

Up to 66%
faster new vehicle deliveries

Offers 50%
lower total cost of ownership and maintenance

Up to 8x
capacity for future growth

Hyundai Nishat Motor (Private) Limited

Disrupts the Pakistan auto market, accelerating new car deliveries by 66 percent

Founded in 2017 as joint venture between Nishat Group, Sojitz Corporation and Millat Tractors Limited, Hyundai Nishat Motor (Private) Limited is an automobile manufacturer headquartered in Lahore, Pakistan. From its plant in Faisalabad and a nationwide network of dealership franchises, the company will build and retail cars and commercial vehicles to private and corporate customers across the country.

"Thanks to industry best practices from SAP and high-performance infrastructure from IBM, we're ready to carve out a niche position in a very competitive market."

Shuja ur Rahman,

Head of IT,

Hyundai Nishat Motor (Private) Limited

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Targeting a competitive space

In the automotive sector, profit margins are razor-thin. Success depends on a critical mix of quality, engineering capability, and operational efficiency. As a brand-new venture in Pakistan, Hyundai Nishat Motor (Private) Limited must satisfy all these industry imperatives while at the same time building a nationwide business, and customer base, from the ground up.

Shuja ur Rahman, Head of IT at Hyundai Nishat Motor (Private) Limited, explains: "Crucially, as a greenfield company we wanted to rapidly capture and expand our market share. We knew that in Pakistan the average time between placing an order and receiving a vehicle was around nine months. If we could deliver faster than that, and compete effectively on price, we were confident that we could create a compelling proposition to win new business from private and corporate customers alike."

Building from scratch

To achieve its goals, Hyundai Nishat Motor (Private) Limited targeted integrated business processes. The objective was to manage its end-to-end operations—from forecasting and planning to manufacturing and delivery—using a single system, based on industry best practices.

"We aim to strike an optimal balance between push- and pull-type manufacturing," adds Shuja ur Rahman. "By combining data on actual customer orders from our dealers with our own order forecasts, we can ensure we have the optimal inventory available in

our plant to manufacture to demand while minimizing our working capital requirements. These processes are far too intricate and complex to manage manually—and we looked for an enterprise-class ERP solution."

Enterprise-class solution

To lay the foundation for its new business, Hyundai Nishat Motor (Private) Limited selected SAP S/4HANA for finance and controlling, human capital management, supply chain management, and more.

Built for big data and deep analytics, SAP S/4HANA helps manufacturers gain actionable insights into their operations and drive high levels of efficiency.

"Of all the ERP solutions we evaluated, SAP S/4HANA was the clear winner," recalls Shuja ur Rahman. "Not only are SAP solutions the platform of choice for many of Pakistan's leading enterprises, they are also among of the most widely used business systems in the automotive industry as a whole. The company's strong presence in our market gave us considerable confidence that SAP had the reach and responsiveness to ensure our deployment was a success, and we were very impressed by the credentials of the local SAP business partner recommended to us."

Platform for growth

Because practically every part of its business would run on SAP S/4HANA, Hyundai Nishat Motor (Private) Limited

aimed to ensure that its platform was always available and responsive for its business users. After comparing a number of x86-processor-based server platforms, the company decided to deploy SAP S/4HANA on three IBM Power System H922 for SAP HANA servers with IBM POWER9™ processors, virtualized with IBM PowerVM® and running the SUSE Linux Enterprise Server for SAP Applications operating system.

"The key criteria for the new platform were reliability, efficiency, performance and scalability," continues Shuja ur Rahman.

"By selecting IBM Power Systems servers, we only needed three physical servers to support our entire SAP S/4HANA implementation, compared to more than 10 physical servers for a similar x86 configuration.

> "We estimate we've achieved a total cost of ownership with the IBM POWER9 architecture that is 50 percent lower than the x86 solution we considered."
>
> Shuja ur Rahman
> Head of IT
> Hyundai Nishat Motor (Private) Limited

"As well as reducing our power and cooling requirements and data center footprint, the combination of IBM Power Systems and SUSE Linux Enterprise Server delivers a significant reduction in our licensing costs. As a result, we estimate we've achieved a total cost of ownership with the IBM POWER9 architecture that is 50 percent lower than the x86 solution we considered."

Effective combination

To deliver reliable, low-latency storage for its new SAP environment, Hyundai Nishat Motor (Private) Limited selected two IBM Storwize® V7000 (predecessor to IBM FlashSystem® 7200) arrays. Built on IBM Spectrum® Virtualize technology, the solution enables the company to harness

compression and thin provisioning to reduce its physical storage requirements by around 40 percent—and to scale out quickly and cost-effectively by adding new drives.

"The combination of IBM Power Systems and IBM Storage ensures that our infrastructure and our SAP S/4HANA environment will scale seamlessly as our business grows," adds Shuja ur Rahman.

Working together with IBM, Hyundai Nishat Motor (Private) Limited deployed its new compute, server and networking environment, and engaged with its local SAP business partner to deploy and configure the SAP S/4HANA solution.

Shuja ur Rahman comments: "Working with IBM on our technology

implementation was a very positive experience, and we were impressed by how smoothly the project went. We are now working with SAP to roll out SAP applications to support all of our business areas."

Fast track to leadership

With IBM and SAP solutions supporting its business, Hyundai Nishat Motor (Private) Limited is on course to achieve its goal of disrupting Pakistan's automotive market.

"One of the big challenges for automotive manufacturers in Pakistan is they are vulnerable to currency fluctuations, which often causes significant increases in prices

Benefits in detail

- Hyundai Nishat Motor (Private) Limited can run its SAP solutions on just three physical IBM Power Systems servers with IBM POWER9 processors, compared to ten servers required for a similar x86 configuration—shrinking its data center footprint.

- By optimizing its power, cooling and software licensing requirements, the company achieved a total cost of ownership for infrastructure 50 percent lower than a comparable x86 solution.

- The company predicts it can grow its user base for SAP S/4HANA by a factor of eight with no need to purchase additional compute, storage and networking resources—ensuring scalability.

- With cost-efficient processes based on SAP best practices for automotive, Hyundai Nishat Motor (Private) Limited predicts it will be able to offer highly competitive pricing to its customers.

- With lean, just-in-time manufacturing driven by SAP S/4HANA on IBM infrastructure, Hyundai Nishat Motor (Private) Limited is confident it will deliver vehicles 66 percent faster than other players—helping it compete effectively for market share.

Key components

Applications: SAP S/4HANA® for Finance and Controlling (FICO), Human Capital Management (HCM), Materials Management (MM), Supply Chain Management (SCM), Warehouse Management (WM), Production Planning (PP), Sales and Distribution (SD), Quality Management (QM), Logistics Execution (LE).

Software: IBM® PowerVM®, SUSE Linux Enterprise Server for SAP Applications

Hardware: IBM Power® System H922 for SAP HANA

for the end customer," explains Shuja ur Rahman. "Because Hyundai Nishat Motor (Private) Limited is also engaging with a global supplier base, we can't eliminate the risk of currency fluctuations. However, by integrating operations in a reliable and cost-efficient manner, we can optimize our working capital and put ourselves in a stronger position to absorb adverse fluctuations compared with our competitors, allowing us to be more agile and responsive with our pricing strategies."

Shuja ur Rahman adds: "Better still, we aren't going to compete on price alone. By using SAP S/4HANA to coordinate our manufacturing processes, we predict that we will be able to deliver on orders in as little as a week, enabling us to deliver vehicles more quickly than our competition."

Today, 100 employees actively use SAP S/4HANA to drive their day-to-day work. As the business continues to grow, the company predicts that it will be able to support an eight-fold increase in business users without making additional investments in IT infrastructure.

"By the end of the year, we plan to have five offices and double-digit nationwide

dealership franchises up and running," says Shuja ur Rahman. "By integrating our SAP S/4HANA platform with our dealerships' own management systems, we aim to make it easy for them to share timely data on actual and forecasted customer orders. Our goal is to create rolling 15-day order forecasts with our SAP solution, and orchestrate our supply chain based on that data. Optimizing our inventory levels through just-in-time planning will help us keep our working capital requirements low, which is a big benefit for a new business."

Looking to the future, Hyundai Nishat Motor (Private) Limited plans to harness more of the advanced capabilities of its SAP S/4HANA platform, including areas such as AI, machine learning and the Internet of Things (IoT).

"By instrumenting our manufacturing process, we think there will be opportunities to uncover the potential to further increase efficiency and reduce costs," concludes Shuja ur Rahman. "Hyundai Nishat Motor (Private) Limited started in Pakistan at square one. Thanks to industry best practices from SAP and high-performance infrastructure from IBM, we're ready to carve out a niche position in a very competitive market."

About the IBM and SAP Partnership

The strategic shift to the cloud and to intelligent technologies isn't easy, but it's how businesses of all sizes will create exceptional customer experiences, uncover new revenue opportunities, optimize investments and fundamentally reinvent how business gets done. SAP and IBM offer the innovations and industry expertise to help.

SAP provides the world's leading intelligent applications and technologies – connecting and clarifying the data that makes processes more nimble and decisions more powerful. IBM helps build smarter businesses and is a global leader in SAP transformations – offering in-depth industry experience, cloud and on-premise deployment expertise, and game-changing intelligent technologies.

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