Business Challenge
As it planned its long-term growth strategy, Kuantum Papers realized that its existing business processes and systems would be unable to scale efficiently. How could the company solve the challenge?

Transformation
The company enhanced its business processes with integrated, ultra-efficient workflows supported by SAP S/4HANA® running on IBM® Power® Systems servers and IBM FlashSystem® storage.

Kuantum Papers
Preparing for growth with scalable, cost-efficient business processes, supported by IBM and SAP

Business benefits:

40% lower operational spend on IT infrastructure enhances efficiency

20% cost-avoidance by consolidating from five physical machines to just two servers

Delivers integrated, scalable business processes that will help the company grow

Founded in 1979 in SAILA KHURD, INDIA, Kuantum Papers Ltd. produces and markets environmentally sustainable, wood-free writing and printing paper. The company produces 350 tons of paper per day and generates annual revenues equivalent to approximately USD 92.8 million.

“Our IBM and SAP solutions will ultimately help us to transform our traditional manufacturing processes into advanced automated workflows.”
Vikas Grover, Head of IT, Kuantum Papers Ltd.
Planning for growth

For more than 40 years, Kuantum Papers has produced environmentally sustainable writing and printing paper. From a single site in India’s Punjab region, Kuantum Papers manufactures hundreds of tons of paper per day, which it markets and ships to clients across the country.

Vikas Grover, Head of IT at Kuantum Papers Ltd., explains, “Our manufacturing operations have grown significantly over the years—from around 30 tons per day when the company was starting out in the 1980s to around 350 tons per day in the present. To continue to grow the company, our long-term objective is to open new business locations and expand into new markets.”

Identifying the requirements

Kuantum Papers realized that extending its business operations more widely across India would increase the complexity of its business processes. Over the years, the company had developed highly effective systems and processes for managing every stage of the value chain: from production planning and raw materials management to quality control and logistics.

“Our existing business applications had supported us well for many years, but we knew that scaling them out to cover new business areas would require prohibitively costly and complex development work,” continues Vikas Grover.

“We are confident that SAP S/4HANA on IBM Power Systems and IBM Storage will help us to build the digital capabilities we need to accelerate our business growth.

Vikas Grover
Head of IT
Kuantum Papers Ltd.

Targeting digital transformation

Kuantum Papers was confident that integrating its manufacturing and back-office workflows would create valuable opportunities to improve efficiency, reduce costs, and enable future business expansion. To support its digital transformation, the company set out to replace its legacy applications and the underlying IT infrastructure.

“We decided to look for a modern, enterprise-class ERP platform that would support the next phase of our growth strategy,” comments Vikas Grover.

“In the future, we want to harness sensor data to increase automation and maximize the availability of our manufacturing assets. As well as enabling us to integrate our manufacturing processes, we targeted a solution that supported the latest industrial internet-of-things (IIoT) technologies.”

Selecting a class-leading solution

After a thorough review of ERP solutions from several vendors, Kuantum Papers selected SAP S/4HANA as the foundation for its new digital business, and engaged an SAP consultant and implementation partner to configure and deploy the solution. “In addition to enabling us to manage our business from front-to-back in a single, integrated platform, SAP S/4HANA offered the highest levels of reliability and availability of all the solutions we evaluated,” explains Vikas Grover. “Another important factor was that SAP S/4HANA delivers native support for real-time analytics and IIoT capabilities, both key enablers of the smart factory concept on our future roadmap.”

Building on a proven platform

To maximize the value of its investment in SAP S/4HANA, Kuantum Papers decided to replace its aging x86 server landscape with a compact, secure and high-performance footprint of IBM Power System S824 servers.
running SUSE Linux Enterprise Server for SAP Applications and connected to IBM FlashSystem® 5000 storage, built on IBM Spectrum® Virtualize. To safeguard its critical business data, the company uses IBM Spectrum Protect to perform automatic back-ups to an IBM TS3100 Tape Library.

"By using IBM PowerVM® to split up our IBM Power System resources into separate logical partitions [LPARs], we were able to consolidate five physical x86 servers into just two IBM Power Systems servers, avoiding 20 percent in capital costs on the equivalent x86 solution," adds Vikas Grover.

"As well as significantly reducing our data center footprint, the combined IBM Power Systems and IBM Storage solution is highly secure, extremely straightforward to manage and offers us all the headroom we need to scale out for at least the next few years. By choosing IBM as our single vendor for compute and storage, we also felt strongly that we would benefit from an expert team with a close, strategic partnership with SAP."

Engaging trusted partners

After procuring the IBM solutions via IBM Silver Business Partner Fore Solutions Pvt Ltd, Kuantum Papers engaged IBM Systems Lab Services to implement the new infrastructure solution and prepare the environment for the SAP S/4HANA deployment.

"The deployment process went very smoothly, and the expertise of the IBM Systems Lab Services team played a valuable role in that project," comments Vikas Grover.

"IBM consultants collaborated with our SAP implementation partner and our internal IT team to develop and finalize the architecture for the IBM Power Systems environment, and perform the necessary configuration work to help us extract the maximum performance from SAP S/4HANA with the shortest time-to-value. Whenever we had a question, we knew we could always get support from IBM, and the team really helped us build the required in-house skills we needed to manage the platform effectively from the go-live and beyond."

Protecting data 24/7

Based on the successful implementation and positive experiences with the IBM infrastructure solution, Kuantum Papers subsequently chose IBM to build its new disaster recovery environment. The disaster recovery platform is based on an IBM Power System H922 server connected to IBM FlashSystem 5010H storage, hosted in a geographically separate data center from the primary site.

Unlocking efficiencies

Since digitizing its business processes with SAP S/4HANA on IBM infrastructure, Kuantum Papers has started to shape the lean, integrated operations it needs to boost efficiency, cut costs, and improve agility.

“We have extended digital workflows to some areas of the business that relied on manual processes before,” says Vikas Grover. “One of the biggest improvements we’ve seen is in our quality-control process. Today, our employees use SAP S/4HANA to access detailed reports on our key-performance indicators and ensure that we are meeting our customers’ high expectations around product quality.”

Capturing new opportunities

By consolidating its production environment from five x86 servers to just two IBM Power Systems servers, Kuantum Papers is unlocking additional efficiencies. Thanks to the 60 percent reduction in physical server footprint, the company has shrunk its maintenance, power and data center cooling costs by a combined 40 percent, contributing to a lower total cost of ownership.

Benefits in detail

- 20 percent capital cost-avoidance achieved by consolidating five x86 servers to just two high-performance IBM Power Systems servers.
- 40 percent lower operational spend on maintenance, power and cooling achieved by shrinking physical server and storage footprint.
- Delivers real-time data replication to Kuantum Papers’ disaster recovery site, helping to reduce the risk of data loss in the event of a recovery scenario.
- Increases integration between each stage of the manufacturing processes, enabling teams to share information more effectively and maintain high levels of quality control.

Key components

Applications: SAP S/4HANA®
Software: IBM® PowerVM®, IBM Spectrum® Protect, IBM Spectrum Virtualize, SUSE Linux Enterprise Server for SAP Applications
Hardware: IBM FlashSystem® 5010H, IBM FlashSystem 5000, IBM Power® System S824, IBM Power System H922, IBM TS3100 Tape Library
Services: IBM Systems Lab Services, Fore Solutions
“One of the biggest advantages we see in the IBM solution is the ability it gives us to protect our SAP S/4HANA data,” adds Vikas Grover. “By replicating data in real time between our primary data center and disaster recovery site, we are significantly reducing the business risk of IT disruption.”

With SAP S/4HANA on IBM Power Systems supporting its new digital workflows, Kuantum Papers is preparing for the next phase of its business expansion.

“Our IBM and SAP solutions will ultimately help us to transform our traditional manufacturing processes into advanced automated workflows,” concludes Vikas Grover.

“Looking ahead, we are confident that SAP S/4HANA on IBM Power Systems and IBM Storage will help us to build the digital capabilities we need to accelerate our business growth.”

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.