



THE RACE TO DELIVER GLOBAL CURES

Unichem accelerates innovation, reimagines production, and strengthens compliance

The pandemic has made rock stars out of the world's leading pharma businesses. It has also revealed the connected, global nature of the industry, and the critical nature of rapid innovation and lock-tight regulation. For Unichem Laboratories Ltd., a world-leader in the production of generic drugs, its vision goes beyond COVID: it wants to lower the cost and widen the availability of life-saving treatments.

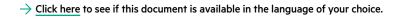
Expanding access to life-saving drugs

Few of us may recognize the names pramipexole, lamotrigine, or tadalafil, but, if you know someone with Parkinson's, epilepsy, or erectile dysfunction, chances are you know someone who has taken one of these generic, Unichem-produced drugs.

Unichem Laboratories Ltd. is one of the world's largest, but perhaps most unsung, pharmaceuticals producers. The Indian business manufactures, markets, and distributes more than 40 generic drugs in the U.S., from beta blockers to anti-allergens. Tramadol, the pain-relief drug, produced by Unichem, is arguably the best known.

"India is the world's largest provider of generic medicines," says Unichem's Chairman and Managing Director, Dr. Prakash A. Mody. "And pharma is the fastest growing industry in the world."

Thanks to a global pandemic, and the rapid vaccine response, this news will surprise few. It has highlighted the global, collaborative nature of pharma research and production. Lab work done in one country is then passed to factories in a second to produce drugs to be consumed in a third. Unichem is at the heart of this global industry. Revenues for 2020 were \$154 million. The quicker it can win approval for new, generic drugs, the faster it can supply low-cost drug treatments to underserved and emerging markets.





INDUSTRY: PHARMACEUTICALS
REGION: INDIA

VISION

Shorten the gap between drug discovery, approval, and production to achieve growth opportunities in Europe and North America.

STRATEGY

Establish a reliable, scalable infrastructure on which to deliver business-critical applications to a global workforce.

OUTCOMES

- Accelerates innovation, enabling increase in ANDAs from 20 to 50 per year
- Improves application recovery times, less than 60 seconds versus 48 hours
- Stores 3.5 TB of virtual machine data in just 769 GB

Shrinking the innovation gap

Unichem wants to grow its existing business in North America and Europe while capitalizing on surging demand for pharma in emerging markets. It needs to do so in a way that is connected, collaborative, and efficient. Its strategy spans two fronts: the production of raw materials (APIs) for other manufacturers and the approval of new, generic drugs (ANDAs).

For the global Unichem business, the goal is to shorten the gap between discovery, approval, and production. The faster it can get innovation to market, the more lives will be saved or improved.

"We have six production facilities in India, a center of excellence in Mumbai, and an R&D department in Goa," explains M. Kumaresan, Head of IT, Unichem Laboratories Ltd. "Plus, operations in the U.S., a European subsidiary in Ireland, and a regulatory office in Brazil. Our future growth is global."

Strengthening global connections

Digital transformation promises to reimagine Unichem's global operations. It will accelerate connections between regional offices and speed the time to scientific discovery. It could also enable global R&D teams to work on a common set of data; artificial intelligence (AI) may unlock new efficiencies in the supply chain. These new ways of working are being driven from a hyperconverged infrastructure, creating a dynamic, scalable platform on which to grow. And at the heart of Unichem's infrastructure is HPE SimpliVity.

Today, some of Unichem's most critical applications run on HPE SimpliVity, including the business, quality, process, and document management systems. HPE SimpliVity has expanded from eight all-flash nodes at the Mumbai head office to include five additional all-flash nodes at the Goa R&D center.

The six production sites will be included in the next phase of expansion.

The catalyst was an upgrade to SAP EHP 8 and a desire to move from a UNIX® environment to Linux®. "We wanted to remove any vendor or technology lock-in, while reducing running costs and improving system uptimes," explains Chetan Jain, Associate General Manager of IT at Unichem.

Conducting a proof of concept on HPE SimpliVity, Jain says the focus was on scalability and reliability, but it was the time needed to recover the SAP® environment that stood out. "The recovery rate for the quality management system in SAP was less than 60 seconds. It used to be at 48 hours to recover."

For Kumaresan and senior management this performance was a must. "When it came to selecting a solution, duplication was a priority. Our applications are critical to the running of the business. They are critical to users and regulators."



Empowering a dynamic workforce

As the business expands, infrastructure efficiency is critical in controlling costs and protecting margins. Unichem now has an efficient and dynamic hyperconverged infrastructure from which to work. To date, HPE SimpliVity has stored 3.5 TB of virtual machine data in just 769 GB. In Mumbai, the cluster of eight HPE SimpliVity nodes produce a deduplication ratio of 39.6:1, with a compression rate of 1.7:1. In Goa, it is 45.1:1 and 2.7:1.

It also means business is more secure, with strengthened continuity. Unichem suffered a ransomware attack in 2019, with systems down for several days. This threat no longer exists. If needed, the speed of duplication means Unichem can spin up a new environment in less than a minute.

"Now, we are in secure hands," says Jain.

Creating digital workflows

The business is also more mobile, and better connected. Today, Unichem's 300-strong R&D team can work from anywhere. Critical R&D apps such as Chromeleon, can be accessed remotely. Rather than separate data sets kept in Mumbai, Goa, or elsewhere, there is a single set of data from which to work. It creates the dynamic, connected conditions necessary for innovation, says Kumaresan: "Data maturity is a journey, and we're not where we want to be yet, but we are moving quickly in the right direction."

In sustainability terms, remote working has removed the need for travel between sites, slashing travel costs and carbon emissions, and quickening decision times. The business has moved from paper-based processes, with documents being signed in one location then couriered to another, to almost entirely digital.

This drives consistency and reduces opportunities for human error. It is essential in creating the robust audit trails demanded by industry regulators.

In an unprecedented year, Unichem's robust digital capabilities enabled the business to ride out turbulence. It also sets up the business for long-term success, says Mody: "As the industry moves towards a paradigm where disruption is the new normal, it is the differentiated thinking around drug delivery systems, molecules, and compliance benchmarks that will drive growth. This makes it essential that innovation is fostered at every level across the value chain."





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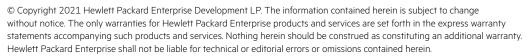
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