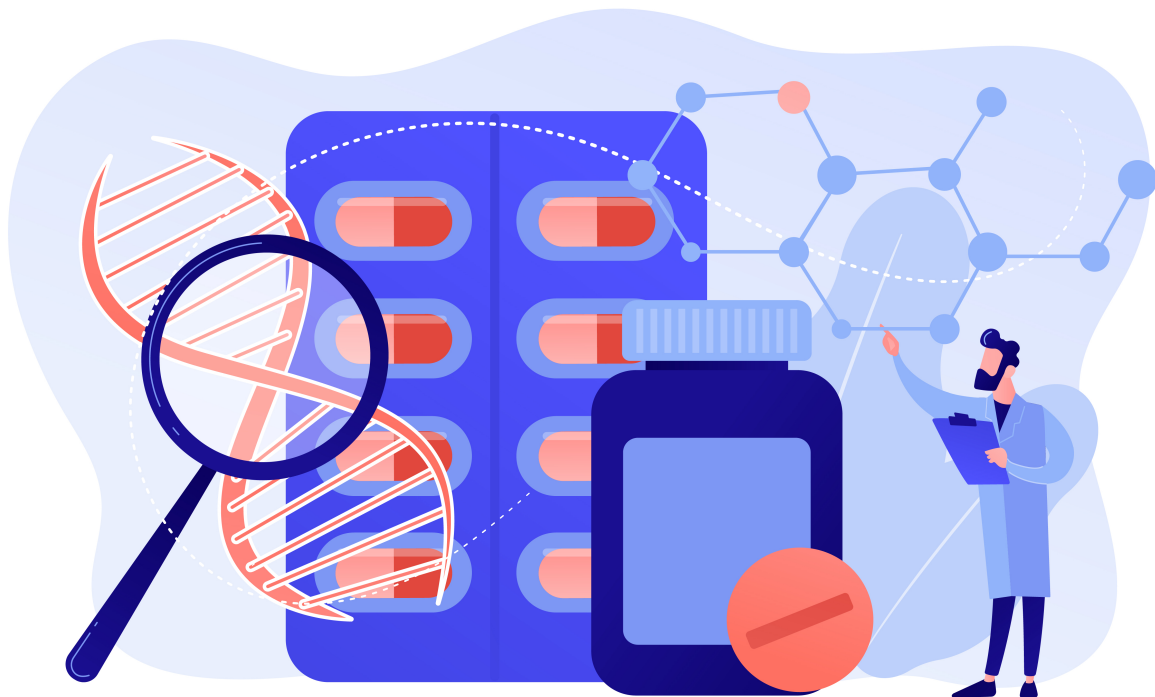


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Automating Odisha's Drug Distribution Chain

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How my team and I automated Odisha's drug distribution chain to create delight for users.



I had no idea how complicated drug distribution systems could be before I took on this project. Back in 2017, we were trying to brainstorm a solution to overhaul the whole drug supply chain management process in Odisha. **Procurement, distribution, quality control, real time demand assessment, tracking- there were many components that needed a seamless interface for easy integration.** For us, technology was the natural ally in anchoring the transformation from a limited software application to the far more robust and scalable [e-Niramaya](#). It has been a journey of delight interspersed with challenges but definitely the one I cherished and feel elated to share here.

When We Began to Experiment....

Four years back, not all was smooth on the drug distribution map. [Odisha State Medical Corporation Limited \(OSMCL\)](#), the agency responsible for procuring and distributing drugs,

bumped into challenges on and off at different stages. The authorities had been using an application for years without upgrade. Though the software had achieved some scale in automation, it did not enable OSMCL to track key parameters efficiently like quality, inventory, logistics, etc. When we started conversations with the officials, we knew they faced challenges in tracking the drug supply trail as there was stock mismatch at the warehouses. The officials were unsure of the data they were fed with on quality, inventory, logistics and procurement. Our team, receptive to their concerns, found there was no foolproof mechanism to validate this stream of data.

En Route to Developing E-Niramaya

The team wasn't exposed before to the workings of a drug supply chain. This was our debut project with OSMCL and also, the first interconnected system we were trying to develop in this domain. We realized they needed an automated system that could ease manual interventions in areas like overseeing stock position, tracking orders and recalling drugs if needed, without hassles. For drugs nearing expiry schedule or placing new orders for new drugs, there was still a lot of paper work. We understood the pain. **The need to replace mundane processes and inject more transparency is what birthed our solution.**



We studied the fault lines of the existing system and to the client's delight, the solution went live in two and a half months. But this wasn't without the share of struggle that any digital solution meets. Most of the users familiar with the conventional system were hesitant to

switch over to the new solution. Thus, initially, our solution had a low acceptance level. However, the then MD of OSMCL gave us ample support in the implementation journey. Being aware of the flaws in the legacy system, he saw promise in our solution. The team did its diligence. We took care of every possible glitch in the implementation and attended to the client's questions and problems. That apart, we built close coordination with other departments to smoothen the implementation process.

The Solution's USPs and The Transition

Our application, [e-Niramaya](#) has given a dynamic touch to the drug distribution chain. The system has given the option to generate purchase order (PO) depending on monthly consumption. The adoption of the solution has reduced PO generation time by a 50 per cent without compromising on data accuracy. **The cumbersome task of providing 570 types of medicines, 83 surgical items, 107 anti-cancer items, 6 child health items, 6 nutrition program, 28 malaria control programs, and 5 items to fight against leprosy to the right people at the right time has been made possible through this unique system.** We have provided Auto Purchase order generation based on the stock availability in the overall state. Various analytical reports keep the users updated with information on fingertips.

What Could Be the Future?

The e-Niramaya application has the potential of future enhancement with the deployment of [emerging technologies](#). Technologies like [blockchain](#), logistics software, and remote diagnostics can help lower costs and improve efficiency and reliability. I believe the experience we have garnered in the past four years can help us add more configurations to the solution and replicate the success story in other states and nations.

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