

The Power of Simple IT: How HCI Took a Virtual Load Off My Mind

by Dhinakar Ah

Because our world is the stock market, we at Nirmal Bang have to move consistently fast. A significant amount of our computing resources is dedicated to the research and trade activities of our staff and customers. In many situations, our clients have a lot of hard-earned money at stake. They expect us to move at the speed of commerce. Our staff, on the other hand, need to quickly transition between the demands of our customers and those of the market.

[Nirmal Bang](#) is one of the largest stockbroking organizations in India. We provide retail financial products and services such as equities, derivatives, commodities, and more. Aimed at both individual investors and institutions, we specialize in creating diverse teams of subject experts to provide high-quality investing services. Very simply, our aim is to maximize investor returns.

Over my past two decades working in IT, most of that time has been spent around firms focused on investments. When I began with Nirmal Bang in 2010, I already understood the critical importance of operating speed.

I was drawn to serving in retail investing companies because of that fast pace and lack of tedium. Nirmal Bang wanted to harness my experience to find a way to move the company forward. One of my first challenges was updating the technology infrastructure that allowed our company to operate.

Wasted Time Is Wasted Money

Like the assembly lines of yesteryear, modern companies also have complex systems involving multiple parts. High productivity is generally the result of every one of the components working well together. In a similar fashion, no employee wants to work within the unit causing a bottleneck. Unfortunately, due to some of our infrastructure, IT was that bottleneck far too often.

Although I am sure the system was perfect for the time in which it was implemented, in retrospect it was quite a time-sink. Our traditional hardware setup required a lot of direct human interaction. We needed at least two people to monitor storage and networking. We had different teams composed of experts in different hardware functions. Activities like reallocating server resources or updating capacity were incredibly tedious and often required hours of delays.

This was how the system worked when everything was great. Problem-solving was a whole different monster. Because monitoring was labor-intensive, it could be easy to miss ongoing trends. When staff did discover a problem, it was often difficult to effectively diagnose the cause. We would frequently have to walk through each of the components one by one. That required a lot of research and development every time we needed to correct issues.

In our industry, as you might imagine, employees who are sitting around with nothing to do are not happy. Our company needs a massive database of information to make smart decisions. Without that resource, staff can't conduct trades or provide advice. Since many employees have their income linked to productivity, they often felt as if the downtime was directly costing them money.

IT downtime doesn't just impact your company. Your end users often feel the personal burn of lost productivity. #NutanixStories

On the other hand, our customers definitely do not appreciate any delays that could potentially impact things as important as their life savings. Humans build trust based on reliability, and we need to trust where we place our money. When we had downtime, every second of delays counted. Even things as routine as server resource changes could cost us opportunities.

We knew it was time for a change.

A Venture into Hyperconvergence

Thankfully, Nirmal Bang is committed to trying new things. There are people in the world who prefer living rigid lives without ever making changes, but I am proud to say that our company is full of people who are willing to try innovative solutions. When we knew that our traditional hardware-based architecture needed an update, our partner [Network Techlab](#) helped us select [Nutanix](#) and played an important role in executing this project successfully.

No single thing made us choose Nutanix over other options. Like any organization, the decision involved many factors and different perspectives. Nutanix is focused on offering software that can connect public and private cloud infrastructures to seamlessly power applications and data analysis. They build their services on hyperconverged infrastructure, which is a completely virtual, software-driven resource. At the time, we were the only retail investment company using their software.

Almost immediately, we fell in love with their responsiveness. Nutanix had incredible insights into hyperconvergence and we knew working with them, along with Network Techlab, would make for a smooth transition. They quickly brought us up to speed with their vision for how their product could give us the tools we needed. Their dedicated staff and deep knowledge gave us the confidence that this

change could work.

A Two-Week Migration

Although we were initially excited about Nutanix, we were still a bit apprehensive about the migration. Making any major change to mission-critical technology is enough to make IT professionals incredibly nervous. Fortunately, they provided clear-cut transition tools that created a smooth process. It took us less than two weeks' time to complete the entire migration.

We saw tremendous improvements immediately. Our mission-critical OMS and Feed applications were faster right out of the gate. This led to a significant improvement in our order execution time.

Nutanix offers a complete, one-stop solution. We were able to monitor our entire infrastructure on one screen and have complete visibility into our hardware capacity. Imagine having system information about networking, data storage, and security all in one place. We saved a great deal of time problem-solving. Issues that used to take us hours of downtime could now be solved in a fraction of that time.

A single pane of glass = one-stop shop for problem-solving. #NutanixStories

We also saw significant improvements in everyday operations. Our systems start up at least 30% faster. Shutting down at the end of the day takes half the time. Formerly labor-intensive tasks like server allocation or increasing capacity for a single project now happen with the click of a button and takes only minutes. We even saved money on monitoring servers and third-party analysis tools. Everything about our IT operation is simpler and faster.

Peace Of Mind

As an IT professional, I'm more comfortable knowing that my office is no longer a potential bottleneck in operations. There is less stress-inducing downtime. Our staff wastes less time waiting for computers and even response times are shorter. Our new flexibility gives us more time to think innovatively and try new things.

In an industry like ours, technology changes quickly. But it's not easy to align the technical teams and prepare the business team for downtime. It makes necessary upgrades a painful job. Now, we can move onto the newest systems with no disruption to our business. It's simple to add new hardware to the cluster and migrate our application onto it. This means that, regardless of advancements in technology, our business won't skip a beat.

Best of all, I no longer have to worry about the state of the servers during my day. That peace of mind alone is worth the price of admission.