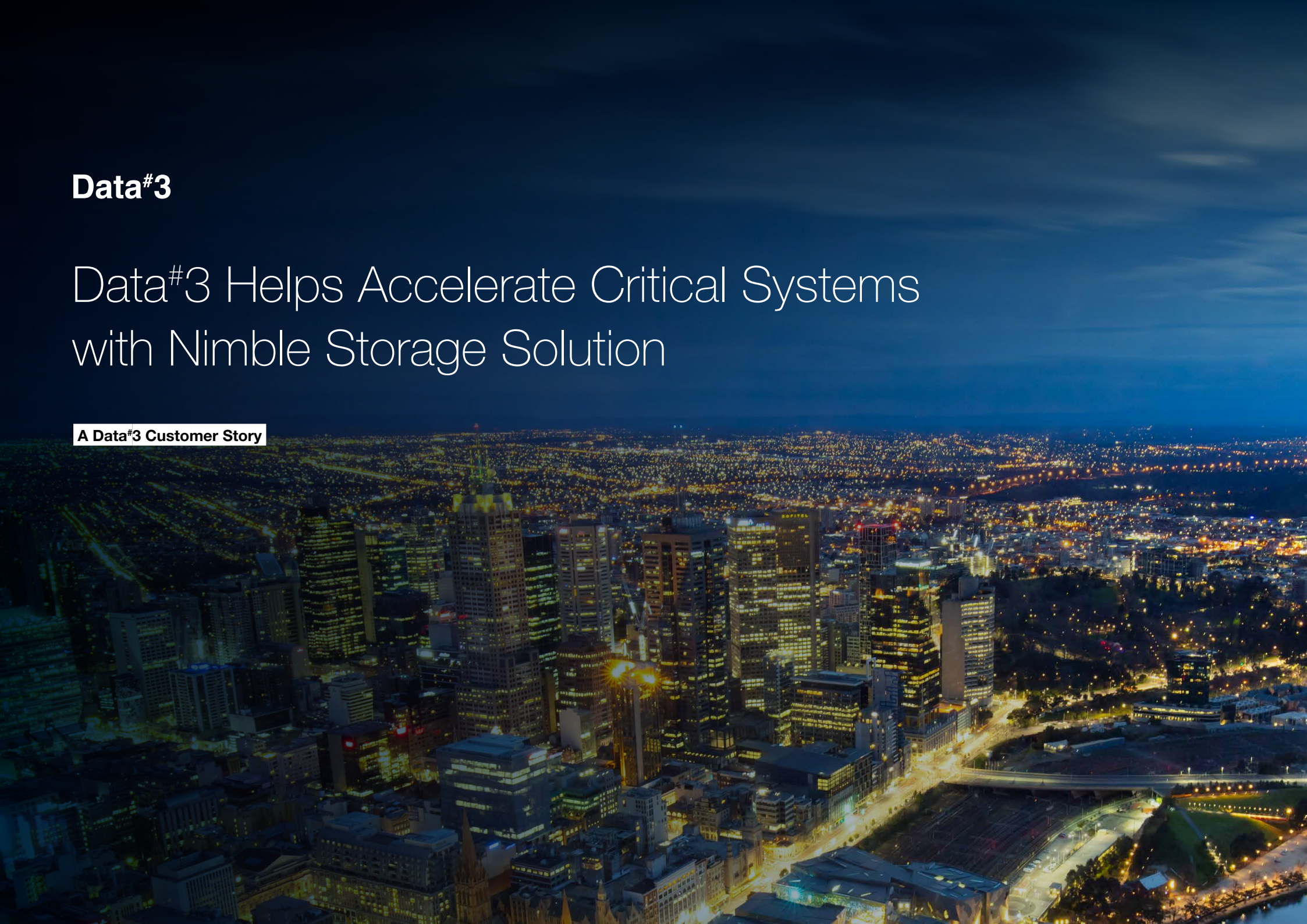
Data#3

Data#3 Helps Accelerate Critical Systems with Nimble Storage Solution

A Data#3 Customer Story



Data#3

ABOUT THE COMPANY

Responsible for a busy road and public transport environment, the customer values technology as an enabler of better services for the population it serves. As new opportunities emerge to reduce congestion, increase efficiency, and communicate with road and transport users, the demands on the core infrastructure increased.

OBJECTIVE

Responsible for a busy road and transport environment, the customer values technology as an enabler of better services for the population it serves. Aging infrastructure was causing slow application delivery to core transport systems, and this had to be urgently addressed.

FUN FACT

By 2023, **40%** of I&O teams will use AI-augmented automation in large enterprises, resulting in higher IT productivity with greater agility and scalability.

Gartner (2020), Gartner Predicts the Future of AI Technologies. [Online] https://www.gartner.com/smarterwithgartner/gartner-predicts-the-future-of-ai-technologies/

COMMENTS

"Instead of taking the easy path, we looked at which available technologies would best align to their organisational needs. This meant digging deeper to establish where the customer could not only solve immediate problems, but could also make best use of emerging technologies."

Warren Hill, Account Executive, Data#3 Limited.

APPROACH

The customer embarked on a competitive tender process, and recognised that the proof of concept from Data#3 and Nimble would exceed their original expectations.

BENEFITS

- Quickly deployed solution that is easily managed
- Faster application delivery
- Analytics engine allows smarter infrastructure deployment
- Aging infrastructure decommissioned by Data#3
- Able to make full use of intelligent road systems
- Able to use data for better supported decision-making
- Better directed IT spend

TECHNOLOGY

- ☑ Nimble Storage
- ☑ Project Services
- ☑ HPE Support

The Background

Responsible for a busy road and public transport environment, the customer values technology as an enabler of better services for the population it serves. As new opportunities emerge to reduce congestion, increase efficiency, and communicate with road and transport users, the demands on the core infrastructure increased.

An aging storage environment was hampering the organisation's ability to capitalise on modern technologies, so a competitive tender process was initiated.

The Challenge

As with most government organisations, the customer had a program in place to replace existing infrastructure as it aged. This process cuts risk of equipment failure, and reduces the cost and support demands that are involved.

When the customer issued a competitive tender, Data#3 and HPE identified a more appropriate option than a 'like for like' replacement of the dated Dell storage environment. Having acquired intelligent flash storage experts in Nimble back in 2017, HPE had access to technology that went beyond initial requirements and would solve some frustrating business problems the organisation faced.

Slow storage response times meant that critical systems, such as connected speed limit signs and real-time public transport timetables were impacted. This undermined the customer's investment in modern transport infrastructure, preventing the full value from being realised. Traditional storage environments also place heavy demands on IT staff, and management and support of such systems is more cumbersome than intelligent, modern alternatives.

In addition, while large amounts of data were being generated and stored, these resources were not being translated into valuable information. The Data#3 and HPE team recognised that intelligent storage could enable staff respond in real time to traffic flow, and, said Data#3 Account Executive, Warren Hill, this would allow for more accurate planning going forward.

"Instead of taking the easy path, we looked at which available technologies would best align to their organisational needs. This meant digging deeper to establish where the customer could not only solve immediate problems, but could also make best use of emerging technologies."

IT Outcome

The customer chose a solution based on a Nimble storage array connecting with its existing Dell server. Nimble's flash storage lends speed for application delivery, but it also has some qualities that take it far beyond expectations. For a government organisation delivering services that must prioritise safety, it is unsurprising that a proven 99.9999% reliability was attractive. Nimble uses a design feature called Triple+ Parity to enable it to continue working even in the unlikely scenario of three simultaneous storage drive failures. In the always-on road and transport environment, that means that the applications controlling traffic lights and passenger information can continue uninterrupted.

Positioning an alternative to the planned storage replacement hinged on the intelligence advantage that HPE and Data#3 outlined. The solution drew on HPE's InfoSight predictive analytics flash AIOps platform to aid data management, and give real-time insights into the busy transport network.

"We saw that their needs would better align with this smart technology that is unique to Nimble, giving them superior insight and integration. It uses an AI engine that sits on top of the Nimble platform, constantly monitoring how well the systems are performing, which clusters are performing well, where there is a need for upgrade, and provides this information back to administrators to reduce the requirements on the system," said Hill.

For an organisation striving to get the best from an ongoing digital transformation, easing the burden of storage administration, and introducing a replacement that largely manages itself, was the icing on the cake. As storage needs expand, the building block approach of HPE means it is simple to just add another Nimble module.

Business Outcome

Given the imperative to avoid dependency on aging equipment, the customer needed to move quickly. Soon after choosing to proceed with the Data#3 and HPE solution, work was under way. Skilled Data#3 engineers worked on a four-week deployment, and had workloads running within six weeks of the customer's decision. The fast turnaround was made possible by the combination of Nimble's strong management features and a well-drilled Data#3 and HPE team working closely with the customer's in-house team.

"Data#3 did the deployment, featuring a fully redundant solution across two data centres. It was done during business hours, without disruption, with the storage devices plugged into the existing environment and the old equipment decommissioned," explained Hill.

While users did not experience a disruption to their working day, they soon experienced the benefits of faster application delivery. Indeed, where the previous storage environment had made it all but impossible to run certain applications, the Nimble solution broke through this restriction quickly. In particular, the combination of fast analytics and speedy application delivery made it possible to address traffic flow at a notorious congestion hot spot, so that speeds could be adjusted throughout the day, according to current needs.

While safety is number one, value is always high on the agenda. This is another place that the solution checked a lot of boxes, with more data stored per terabyte than flash storage alternatives, and a lower human resource cost to manage the environment and maximise the value of this key investment. Skills transfer for their in-house team ensured they were prepared to fully support the new storage environment in a fraction of the time taken by traditional alternatives.

Conclusion

Much of the success of the Nimble Storage implementation lies with the customer's willingness to explore an alternative to the status quo.

A highlight, said Hill, was the combination of two solutions architects, from HPE and Data#3, working together to make the implementation run smoothly.

"The customer had high praise for HPE for putting together a compelling proposition instead of taking the easiest path. Our relationship with HPE has spanned more than two decades, and this experience helped us to identify where we could use their technology to go beyond the customer's expectations," explained Hill.

"The platform is ideally designed to manage infrastructure for a rapidly evolving, intelligent transport program – everything from lights, buses, train timetables and rail crossings. They were previously just storing data, not manipulating or understanding data, but now they are positioned to use AI for better supported decisions for the future of their organisation."

Data#3

1300 23 28 23
facebook.com/data3limited
twitter.com/data3limited
linkedin.com/company/data3
youtube.com/user/data3limited