

## CUSTOMER PROFILE



### INDUSTRY

Digital Business

### CHALLENGE

Improve race analysis, evaluate race strategies, and enhance riders' tactics

### SOLUTIONS

- Real-time data analytics running on Dell EMC VxRail™ Appliance, secured in a truck for maximum mobility
- Further analysis using the Dimension Data Managed Cloud Platform

### RESULTS

- New insight with improved accuracy and speed of data
- 75 percent less time setting up and shutting down
- No large capital outlay sitting idle between races

## DIMENSION DATA

### Mobile data innovation enabling real-time performance improvements in professional cycling

#### DELL EMC VXRAIL™ APPLIANCE TRANSFORMS MOBILE IT EXPERIENCE

Dimension Data uses the power of technology to accelerate its clients' ambitions through digital infrastructure, hybrid cloud, workspaces for tomorrow, and cybersecurity. The latest example is in the world of cycling where the company is working with Team Dimension Data to test telemetry and data analytics with its riders. The solution will be used to provide other professional cycling teams with real-time insights on rider performance, fitness, and the effectiveness of strategy during races. The learnings can also be applied when preparing for future events.

Testing of the solution started at the team's training camps held in Cape Town at the end of 2015 with a view to industrialising the solution in 2017. Mobility was one of the biggest challenges. Previous versions of the solution consisted of separate servers, networking, and storage transported in a mobile data truck. That relied on everyone's best efforts and was time consuming.

#### THE CHALLENGE

The truck poses several challenges. Tim Wade, Director of Architecture in the Dimension Data Sports Practice, says: "We need to capture the data, apply complex algorithms, and present it back to the race team – all in a five-second window. So the solution has to assure ultra-low latency and 100 percent race time reliability."

“With the Dell EMC VxRail™ Appliance, we get one-button shut down at the end of the race. That equates to a 75 percent time saving, so we get on the road sooner. In addition, there’s no large capital outlay sitting idle between races.”

Tim Wade Sports Practice Senior Director,  
Architecture Dimension Data



Space limitations are another key factor. Before each race Dimension Data specialists unpack over a dozen different bits of kit, check each one, and then add all the software and analytics layers. During the race, if something got dislodged during transit, they’d have to spend even more time troubleshooting.

The production environment often runs in parallel with test and development at the live event. That means engineers may have to write code and workarounds on the spot. Those activities run alongside each other, but on separate platforms, again adding unnecessary cost and effort.

### THE SOLUTION

The solution is a unique example of how mobility and big data can transform the world of sport, in this case by enabling cyclists to train and race smarter.

Based on VMware vSphere and Virtual SAN, and EMC software, Dell EMC VxRail Appliance enables IT transformation by leveraging hyper-converged infrastructure – a proven building block for the Software Defined Data Center.

Dell EMC VxRail Appliances deliver resiliency, quality of service, and centralized management functionality enabling faster, better, and simpler management of consolidated workloads and applications. The appliances are also fully loaded with integrated Dell EMC mission-critical data services including replication, backup, and cloud tiering.

### THE RESULTS

The role of IT has been minimal in cycling until now, and the addition of the new products has helped Dimension Data improve data speed and accuracy. “Dell EMC VxRail Appliance provides a single dashboard and improved operational visibility,” says Wade. “And it’s also given us the headroom to deliver even more value to race strategy, by aggregating data from different environmental sources such as weather conditions and terrain, for example.”

Through connectivity enhancements in receiving information and data from the athletes, Team Dimension Data can get new insights with greater visibility into what each rider is going through. That means better strategic race decisions.

“At some events we’ve been able to test the tracking of amazing things not seen before in real time, like Team Dimension Data cyclists’ heart rates, power, and the G-forces in play,” says Wade. “The race team can use this kind of data to return fitter and stronger after post-race analysis and training.”

IT management is less onerous and more cost effective. “With the Dell EMC VxRail Appliance, we get one-button shut down at the end of the race. That equates to a 75 percent time saving, so we get on the road sooner. In addition, there’s no large capital outlay sitting idle between races,” adds Wade.

Other benefits include a reduction in height from 10U to 4U. This provides a 60 percent space saving, especially important when working in a confined area. Faster cloning and system set-up has also helped reduce lead times for test and development.

Tim Wade sums up “We’re very happy with our relationship with Dell EMC. They share our passion for innovation and thinking differently.”