

Vanderbilt Swimming



Case Study:

Vanderbilt Swimming

NCAA Div 1 Team • 25 Swimmers



A low-angle photograph of the iconic red brick clock tower of Vanderbilt University. The tower features two large clock faces and is topped with a white stone structure. The background is a clear blue sky, and green tree branches are visible in the corners of the frame.

Vanderbilt University

Vanderbilt University, located in Nashville, Tennessee, is home to a Division I women's swimming program with big dreams. Head coach Jeremy Organ and assistant coach Caitlin Geary have integrated TritonWear technology as part of an improvement plan aimed to give the team a competitive advantage over other schools in the Southeastern Conference. They currently have one unit for each of their 25 swimmers and use the systems on a daily basis.

The team fully integrated the technology at the beginning of the

2016-2017 season. In that time, the coaches have been rapidly learning the most effective strategies for incorporating the technology, and are continuing to find new ways to use the data they collect.

In order to understand exactly how Vanderbilt is using the technology to its advantage, TritonWear spoke to head coach Jeremy Organ about his experiences, the benefits of using the systems, and his hopes for the future.

Transitioning to TritonWear

Jeremy Organ
Head Coach



Vanderbilt's coach-to-swimmer ratio was the challenge that originally inspired it to choose TritonWear. Trying to keep an eye on every single swimmer and provide useful feedback – a necessity in a highly competitive NCAA environment – is difficult with only 2 coaches on deck. "If you're giving times on a set, you're just rattling them out and you can't really watch the swims,"

Jeremy explained. "You can't take splits and count strokes and calculate stroke rates all at the same time." When he heard about TritonWear, he

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jumped at the prospect of collecting instantaneous feedback for every swimmer in the pool at the same time with zero effort.

At first, incorporating TritonWear required a bit of a comfort adjustment for swimmers who were particular about the way they place their caps and goggles. That didn't last long; they adapted quickly and now everyone is comfortable wearing the units. They've found the correct spot on the back of the head to optimize data-collection and hardly

notice they're wearing them any longer.

Coaches also had to make a couple adjustments when transitioning to TritonWear. First was simply breaking out of ingrained habits. They had to let go of old-school methods like standing over a lane to give splits and accept that the information would come to them through the iPad. This became easy after using the units for some time and learning to trust the data. There is rarely any incorrect information, Jeremy asserted, "They're pretty much dead-on."

Daily Use

When swimmers hop in for warmup, Jeremy prepares the Triton units. After warmup, everyone hops out to retrieve their unit. Each swimmer has the number of their unit (aka their own Triton “buddy,” complete with individualized nicknames) memorized so that the setup is quick. Then they

get back in the pool to begin the main set. The whole transition process is only a few minutes long.

During the main set, coaches find an application for the data no matter what type of training the team is doing on that particular day. Whether it’s an aerobic Monday, a threshold Tuesday, a quality Wednesday, or a race-day Saturday, coaches keep an eye on the data to look for any inconsistencies and then communicate the information back to swimmers.

TritonWear is most effective to use during pace work, when stroke counts, stroke rates, and kicks underwater need to be very specific. If any

swimmer in the pool is falling off pace, it becomes instantly clear and coaches can pull up that swimmer’s data across all metrics to see what they can learn from it. Jeremy will often take swimmers aside to have a look at their data

between sets – in a set with 3 rounds, he can give feedback after each round. These quick, useful exchanges during the main set allow swimmers to make immediate adjustments that can change the outcome of their practice.

At the end of workout, units are collected and dried off. Then Jeremy takes them home to charge overnight in preparation for another day of training.

Coaches find an application for the data no matter what type of training the team is doing.

Benefits of TritonWear

Coaches have access to much more information using TritonWear than they would using only two sets of eyes. With the confidence that data is constantly being collected on all swimmers simultaneously, coaches gain the luxury of actually watching the practice, free of routine tasks like getting splits. TritonWear makes up for the fact that there are only two coaches by compiling a personal database for every swimmer in the pool.

But it isn't just the coach-to-swimmer ratio alone that makes the systems beneficial. "We use TritonWear because there are only two of us, but even if we had more coaches we would still use

it just because of basic data tracking," Jeremy explained. "Even if you have all the coaches you need, this information is recorded and you can use it to have discussions with athletes."

TritonWear is valuable when used as an educational tool to open up conversations with swimmers. Coaches at Vanderbilt encourage the team to go home after practice and take a look at their online profile – especially if they did something great or they struggled during the set.

Everyone receives an email with a data summary from the previous practice, allowing swimmers to reflect on their training rather than just forget about it and move on. Some of the more

motivated athletes come back the next day to discuss results with their teammates and mention noteworthy pieces of data to coaches.

Jeremy pointed out that kids these

days are more data-driven, and he has swimmers who unexpectedly became much more engaged in their training as they developed an interest in the data.

The swimmers who are open and receptive to the technology have used it as a way to improve. While not all of his swimmers are as

motivated to learn from the

data, overall Jeremy has seen the team grow to appreciate the benefits of the technology. "It's a lot more fun to come to the pool," he remarked.

There has been a trend toward increased athlete engagement since the team has incorporated TritonWear in its program.

Data collection has inspired a new practice at Vanderbilt: swimmer of the week recognition. After each week, coaches go back to examine the data online and look for a swimmer who stood out with strong performances in training. The team knows that coaches use TritonWear data to choose the swimmer of the week, and coaches are confident they can make a good judgement call because they have hard data to justify their decision. After selecting an athlete that stood out during the week, coaches post it on social media as a way to keep the team excited and engaged.

Coaches are continuing to look for new and exciting ways to use the data, and they've found that individualizing practices based on metrics has been

an effective strategy. TritonWear makes it easy to give specific feedback to different swimmers based on their needs. For example, a swimmer that is working on improving her underwater kick benefits from comparing time spent underwater on each length. For distance swimmers, split times need to reflect the correct pacing and descending.

Stroke rate is crucial in backstroke, and when Jeremy noticed his backstroke group was struggling with their rates, he used TritonWear as an intervention tool. It was easy to measure the 6 individual rates for each of his backstrokers and then cross-examine those values with speed. Each swimmer was tasked with finding their uniquely optimal stroke rate based on this data

so that they could see exactly how they needed to improve and how their adjustments would affect their times in competition.

Thanks to this targeted work on stroke rates, Jeremy's backstroke group saw big improvements at their mid-season invite. The team wasn't fully rested for the meet – results were used to gauge progress in the season – but they had success nonetheless; one swimmer had two lifetime bests in the 100 and 200 backstroke. "I do think that was a direct result of becoming more accountable with stroke rates while doing it over and over with the TritonWear systems," Jeremy asserted. He was pleased to see the technical work in training translate into real benefits in competition.

Looking Ahead

Jeremy is excited for the future of data-driven training as technology becomes further integrated in the sport of swimming. TritonWear is constantly upgrading with new features; in only a short time using the systems, Jeremy has seen big advancements in the system's precision and capabilities.

As Vanderbilt coaches continue to find new ways to use the technology in their program, they are considering investing in a TV to pair with their iPad. By screen sharing their iPad onto a larger monitor, they would be able to display the TritonWear data for everyone in the pool to see. That way coaches wouldn't need to constantly relay the information verbally –

swimmers would be able to see it for themselves.

It's more than just an extra coach, it's almost like having an individual accountant for every athlete in the water.

Thinking long term, Jeremy is excited to accumulate more data so that he can begin making comparisons on a much larger scale. Examining data progressions is one of TritonWear's most useful functions, and the more data that's been collected, the better. In addition to overlaying test set results for individual swimmers, Jeremy explained he'll begin taking a look at performance cycles within a season. If the entire team isn't swimming well in practice at a particular time of year, it's possible to look back and figure out why – using real evidence rather than relying on memory, since everyone

remembers things differently. The data becomes an incredibly valuable source of feedback that makes it possible to determine whether the training is effective based on long term trends.

Even further into the future, Jeremy looks forward to comparing data on a year-to-year basis. Once he has multiple years of data at his fingertips, he'll be able to use it as a tool for encouragement. If a swimmer on the team ever got frustrated, he could simply pull up old data and say, "Look at how much better you are compared to this time last year." Swimmers trust the data because they know it isn't lying. Showing them their progressions can be used to build confidence, and on an NCAA team, confidence is everything. Little breakthroughs can make all the difference.

Overall Effectiveness

“Without a huge staff, being able to collect information to meet the needs of everybody more efficiently and effectively is a huge advantage,” Jeremy said of TritonWear’s value to the Vanderbilt program. “We have the feedback we want and we’re able to give it to the swimmers and learn from it and grow from it – it’s definitely meeting our goals.”

TritonWear offers a competitive advantage to NCAA teams that use it effectively. But Jeremy believes the

Overall, it's been a terrific experience

technology can be valuable to teams of any size and structure. He plans to continue expanding his use of TritonWear and provide the opportunity for other teams to try it out when they visit Vanderbilt. By ordering extra units and setting up test accounts, he hopes to share the wealth and show others how beneficial the technology can be.

Jeremy is certainly pleased with the positive impact TritonWear technology has had on his program. “Overall, it’s been a terrific experience.”



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